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PUBLISHED BY THE
SOCIETY OF ANTIQUARIES OF LONDON
VOLUME LXVIII



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I.—*Our Lady of the Pew. The King's Oratory or Closet in the Palace of Westminster.* By CHARLES LETHBRIDGE KINGSFORD, Esq., M.A., F.S.A.

Read 7th December 1916.

DURING the comparatively brief period of its existence references to the chapel of our Lady of the Pew are not uncommon. But so quickly did its memory perish that John Stow writing some sixty years after its disuse was at first hopelessly in error as to its position. In the original edition of his *Survey of London* he connected it with the house of Bethlehem Hospital by Charing Cross. This error was corrected in the second edition, where our Lady of the Pew is described as a smaller chapel, which was sometime by the chapel of St. Stephen in the Palace of Westminster.¹ Even when the more part of the history of the Pew was accurately brought together in J. T. Smith's *Antiquities of Westminster*, the author so little appreciated the character of the chapel, that after remarking 'No etymology of the term le Pew has as yet been attempted', he went on to allege: 'no difficulty in settling it will remain when it is remembered that the French substantive *Puits* means a well, and known that in or about the Palace of Westminster were no fewer than four wells still remaining.'²

In view of these doubts and hazardous conjectures, I will before proceeding to the history of the chapel first endeavour to fix its position and the meaning of the name. Smith's fanciful derivation may be safely dismissed; apart from its inherent impossibility, there is nothing to connect the Pew with any of the four wells, though two of them were at no great distance from the chapel. Equally impossible seems the suggestion that the name is derived from *pue*, a French diminutive of *pitié*, and signifies our Lady of Pity.³ The word 'pew' is most probably derived from the Old French *puie*—Latin *podia*—with the meaning at first of 'rampart' or 'balustrade'. If, however, the image of our

¹ *Survey of London*, ii, 121, 264.

² *Antiquities of Westminster*, 124, 125.

³ Britton, *Dictionary of Architecture and Archæology in the Middle Ages*.

Lady at the chapel of the Pew may be identified with the image of the Virgin which Henry III bequeathed to his son,¹ there might as regards the chapel of the Pew be an alternative derivation from Puy in France, since Eleanor of Provence, the queen of Henry III, had associations with Puy. In that case the epithet should belong to the image, our Lady of Pew, and not to the chapel. But in the earlier instances of the name down to 1450 it is the chapel of 'la Pewe' (1394) and the oratory called le Pewe (1443), whilst the image is referred to as 'in la Piewe' (1369) and 'in Pwa' (1411).² These descriptions are all from official documents. It is only at a later date that the form 'our Lady of Pew' becomes usual, especially in wills and other unofficial documents. So it seems likely that the name applied properly to the chapel, and that its application to the image was due to a popular though not unnatural corruption.³

The king would of course have had a 'pew' in any chapel which he frequented. But there seems no reason why the name should not have been specially attached to his private oratory, or why the chapel 'de la Pewe' should have meant anything more than the chapel of the king's closet or pew within the palace. In the earliest reference to it, about 1333-6, it is described as an oratory of the king between the new chapel (St. Stephen's) and the Painted Chamber, and in 1357 we have reference to the cloisters of 'le Pue'. In 1393 it is called the king's closet of St. Mary 'de la Pewe', and in 1443 is described as an oratory called 'le Pewe'. In its early use the word 'pew' was apparently not confined to an enclosed seat in a church, but was applied also to a private oratory or closet. So Mallory writes: 'He founde a preest redy at the Aulter: and on the right syde he saw a pewe closed with yron;' here 'pew' seems to be used of a chantry chapel. The chapel of 'la Pewe' is called both the king's oratory and the king's closet. So it was natural under Henry VIII for payment to be made to 'the clerk of the closet for money in charity at our Lady of the Pewe'.⁴ We get closet and pew as synonyms in a will of 1572, wherein the testator desires to be buried under 'my closet or pew in which I used to sit'.⁵

With regard to the position of the chapel of 'le Pew' we have several fairly good indications. We have already seen how, early in the reign of Edward III, the king's oratory was described as situated between the new chapel of St.

¹ See p. 6, below.

² In 1471 it is still 'beate Marie in le Pewa', see p. 12, below.

³ Forms of the name are 'Pue' in 1357; 'Piewe' in 1369; 'Pewe' in 1393; 'Puwa' in 1411; and 'Pewe' in 1443. All these variations occur for 'pew' in its ordinary signification. See *N.E.D.*

⁴ *Letters and Papers, etc., Henry VIII*, v, 756.

⁵ See *N.E.D.* sub voce 'pew'. Henry V in 1415 bequeathed to his confessor 'melius altare de closeta nostra' (*Foedera*, x, 291).

Stephen and the Painted Chamber, and have had mention some twenty years later of the cloister of 'le Pue'. But the most important indication is contained in Letters Patent of 1st January 1443, wherein Henry VI made a grant in survivorship to John Beket, one of the yeomen of the crown, and John Gurney, yeoman of the kitchen, 'of the keepership of the Constabulary situate between the college of St. Stephen and the Privy Palace of Westminster, together with a chamber, and a chimney and a retired chamber in the same Constabulary'. The grant then proceeds as follows: 'que quidem Camera vsque le Tresail et Galerie se extendendo a dicto collegio vsque Capellam beate Marie de la Pewe adiungitur et annexatur, et ab austro versus boream in longitudine, et ab oriente versus occidentem in latitudine se extendit.' The official Calendar renders the first clause, 'which chamber extending to "le Tresail and Gallerie" from the College adjoins the chapel of St. Mary of "la Pewe"'. This seems to be inaccurate; 'adiungitur et annexatur' must refer to something else than the chapel of la Pewe, and I suggest that either 'eidem Custodie' or 'eidem Constabularie' has been omitted by the clerk who copied the grant. The meaning would then be, 'which chamber is adjoined and annexed to the same keepership (or Constabulary) and extending from the College is bounded by "le Tresail and Gallerie" and the Chapel of "la Pewe"'. The point of the second clause then also becomes clear: 'and it extends from the south (that is from the Pew) to the north in length, and from the east to the west (that is to the Gallery) in breadth.' The Letters Patent further contain a grant to Beket and Gurney of the keepership of the garden of the Constabulary, with all its profits and commodities.¹

The Painted Chamber, which adjoined the Privy Palace, was on the south side of the old cloisters, St. Stephen's chapel being opposite on the north side. On the west side stood the White Hall or Court of Requests, which after the Union in 1801 was used as the House of Lords. So it seems clear that the chapel of the Pew and the Constabulary must have been on the east side of the cloister, covering the site, as we shall presently see, of what was afterwards Cotton House.

The reference to the Gallery in the grant of 1443 helps to explain the last of the medieval references to the position of 'le Pew'. In 1494,² when Henry,

Cal. Pat. Rolls, Henry VI, iv, 142. The full text of the grant is given on p. 18 below. The plan given on p. 5 is based on that in *Antiquities of Westminster*, p. 125. The restoration of the east side is conjectural, and in the absence of definite information no attempt is made to show more than the Constabulary, the Pew, and the Gallery. But the eastern block was very possibly more extensive than that shown on the plan.

² Gairdner, *Letters, etc., Richard III and Henry VII*, i, 391.

Duke of York (afterwards Henry VIII), was made a knight of the Bath, the knights 'toke their waye secretly by our lady of Pieu, through St. Stephen's Chapell, on to the steyr foote of the Star Chambre end'. The Star Chamber was in the block of buildings on the east side of New Palace Yard. To reach that point from the Privy Palace it would be natural to pass through St. Stephen's chapel. A hundred years ago there was on the west side of the old cloister a gallery which led from St. Stephen's (then the House of Commons) to the Painted Chamber. Putting the references of 1443 and 1494 together, it seems reasonable to suppose that there was anciently on the east side of the cloister a similar gallery which led from the Privy Palace past the Pew to St. Stephen's chapel. In the Accounts of Buildings at Westminster in 1330-2 there are numerous references to the new gallery between the new chapel (St. Stephen's) and the Painted Chamber.¹ There is nothing to show on which side of the cloister this gallery was. But even if the grant of 1443 had not mentioned a gallery in connexion with the Pew, the reference in 1494 would seem to point conclusively to its existence. Such a gallery would indeed be necessary to give access from the Privy Palace to the Pew. 'Le Tresail' mentioned in 1443 seems to require some explanation; it is, I conjecture, the same as 'Tresance', which is defined in the Oxford Dictionary as a covered passage round a cloister, a passage in a house, a corridor. This agrees exactly with the meaning here required. St. Stephen's chapel (underneath which was the chapel of St. Mary in the Vaults) was above the ground level. So it seems likely that the gallery on the east side of the cloister was above the cloister-walk, as the gallery on the other side would seem to have been a hundred years ago. Accepting this, I venture to suggest that the chapel of the Pew was on the same level, perhaps approached also by stairs from the cloister-walk. For this suggestion there is some support in the reference made by Sir Christopher Wren in his report on Cotton House to offices underneath the room, which is probably to be identified with the chapel.²

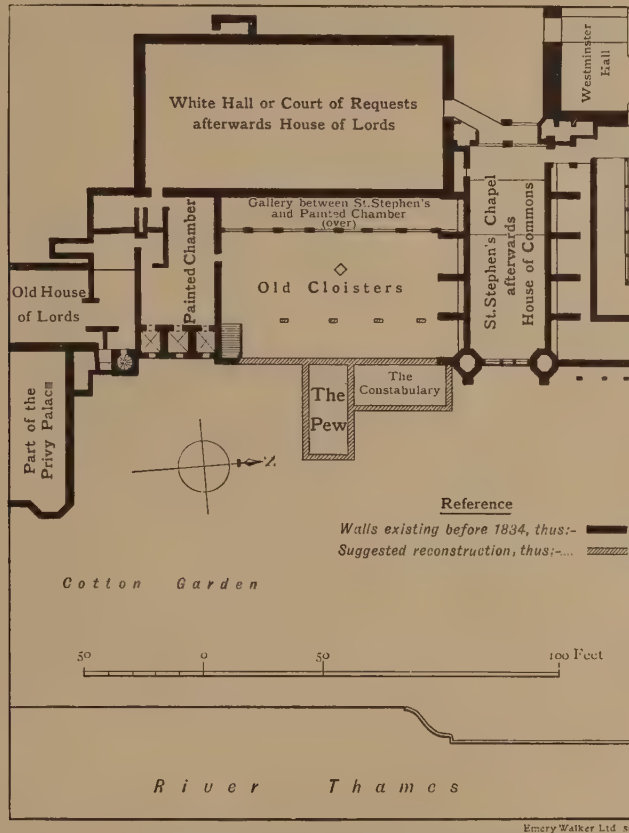
Two other points may be noted. The first that the garden of the Constabulary may be identified with Cotton Garden or a part thereof.³ And the second that to the east of a doorway on the north side of the Painted Chamber

¹ Exchequer (K. R.) 469/10 'pro cc. et di. petr. de Reygate pro nova alura inter novam capellam et cameram depictam prec. c. vjs.-xvs.': 'pro c. bord estrich pro nova alura inter capellam et cameram depictam,' etc.

² See p. 16 below.

³ In *Antiquities of Westminster*, p. 66, the Constabulary is alleged to have been near the west end of the Prince's Chamber, which is clearly wrong.

there were a hundred years ago indications that some building had joined it at right angles: this was probably the block in which the Constabulary and chapel of the Pew were situated.¹



A plan of part of the Palace of Westminster showing the probable position of the Chapel of the Pew.

In Smith's *Antiquities of Westminster*² it is stated that 'persons now living remember a range of building, joining the Painted Chamber, and extending towards the south side of the present House of Commons [St. Stephen's chapel]; in that range was the room in which the Cotton Library was at one time kept,

¹ *Antiquities of Westminster*, p. 45; a foundation was discovered at this point in 1805.

² p. 46; referring to *A New View of London*, p. 652 (published in 1708), where the Cotton Library is described as 'situate near Westminster Hall in the place supposed formerly to have been the private oratory of King Edward the Confessor'.

and which had been formerly, as it is supposed, a private oratory of Edward the Confessor'. The ascription of this oratory to the Confessor must be assumed to be conjectural only. But its position agrees so closely with that of the chapel of the Pew that the tradition identifying the room of the Cotton Library with an oratory of the ancient palace would seem to be well founded. In the *Antiquities of Westminster* the room is, however, identified, though on very slender grounds, with a chapel of St. John the Evangelist which is mentioned in connexion with St. Stephen's, whilst the chapel of the Pew is supposed to have been somewhere on the site of Cotton Garden.¹

It is safe to presume that the Palace at Westminster always included an oratory for the king's private use. So we find mention in 1259 of the queen's chapel within the Palace,² and Henry III thirteen years later in his will bequeathed the furniture of his chapel with the precious stones and other ornaments belonging to the chapel, and the golden image of the Blessed Virgin to his son Edward.³ As we shall see later on the chapel of the Pew was famous for an image of the Virgin, wherein the kings of England had great trust, and for the splendour of the jewels wherewith it was adorned. So it seems very probable that in Henry III's will we have the earliest reference to the image of our Lady in the Pew. Supposing that the chapel of the Pew was identical with the chapel of Henry III, it is not impossible that it may have been as old as the Painted Chamber, which is said to have dated from the reign of the Confessor. There was, however, anciently another chapel in the Palace near the Receipt of the Exchequer, which was in the collation of the treasurer of the Exchequer by virtue of his office; when the college of St. Stephen was founded by Edward III, the Dean and Canons procured that this chapel should be annexed thereto, the chaplain becoming one of the Canons of the college, and the Treasurer obtaining the right (in 1356) of presenting to one of the stalls.⁴ In the *Antiquities of Westminster* it is conjectured that the Pew may have taken the place of this older chapel.⁵ It was not identical, for the older chapel was on the north of St. Stephen's. Moreover, since in 1356 the name Pew was already in use, it is probable that this name would have been given if the Pew was here intended.

I have suggested that the chapel of the Pew was possibly a building of much older date than the reign of Edward III, and the references to it in the building

¹ *Antiquities of Westminster*, pp. 123 and 127.

² *Cal. Pat. Rolls*, 1258-66, p. 61. There is reference to repairs to the 'Capella Regine' in 1311-12, cf. Additional MS. 17361, f. 1.

³ *Royal and Noble Wills*, p. 16.

⁴ *Cal. Pat. Rolls, Edward III*, x, 430.

⁵ *Antiquities of Westminster*, p. 124.

accounts of St. Stephen's chapel and college during that reign contain nothing which points of necessity to a contrary conclusion. Between 1333 and 1336 there was paid to John de Lincoln for 800 of beech laths, for covering and preserving two oratories, whereof one was an oratory of the king between the new chapel and the Painted Chamber, 1s. 4d.; to Thomas Clyp of Greenwich for 800 reeds bought for covering the walls of the gable of the chapel and oratories at 1s. a hundred, with boatage to Westminster, 13s.; to John Nichol for ten pieces of timber for beams and rails for the pent-house over the king's oratory, between the new chapel and the Painted Chamber, the length of each 18 ft., 7s. 6d.; and to Thomas de Greenwich for 400 reeds for covering the gable, oratories, and walls, 4s. Twenty years later, in 1356, Master Andrew was paid 12s. for two ridells (or curtains) bought for the chapel of St. Mary, with two window-bars of iron for the windows in the chancellery, and Robert Founder 2s. for two dishes for the lamp in the chapel of St. Mary. It is not clear whether these payments were for the Pew or for the chapel of St. Mary in the Vaults underneath the chapel of St. Stephen. But perhaps the latter is the more likely. However, in the same year John Prophet received £32 14s. for two hundred and eighteen loads of Reigate stone, bought for the cloister 'le Pue'; in another place we get a payment for four masons working 'super claustro Pue domine Regine et nova camera'.¹ The 'Queen's Pew' is a qualification which suggests a possibility of doubt as to whether it is identical with our building. But the reference to the new chamber in connexion with the cloister of 'Pue' may also suggest identification with the chamber of the Constabulary. In 1394-5 there was expended on ironwork for the cloister £22 9s. 4d.; one item was 4 long iron bars for the windows in a fourth part of the cloister; the work would seem to have been of the nature of repairs.²

So far as these references go they rather imply that the king's oratory between the Painted Chamber and the new chapel of St. Stephen was an already existing building, though it may have undergone a certain amount of alteration and repair. The adjoining cloister and the gallery would, however, seem to have been built in the reign of Edward III.

At a later time we know that the chapel of the Pew was attached to the college of St. Stephen, and the association probably dated from the reign of Edward III. The first specific mention of the Pew, apart from the Building Accounts, appears on 29th September 1369, when Edward III made a grant of

¹ Exchequer (K. R.), 472/4.

² Additional Roll 27018 at the British Museum. See also accounts in *Antiquities of Westminster*, p. 205.

10 marks for life to John Bulwyk, in order that he might celebrate divine service daily before the image of the Blessed Mary in 'la Piewe' by the king's chapel of St. Stephen within the palace of Westminster, for the good estate of the king, for his soul when departed, and for the souls of queens Isabel and Philippa, and of the king's progenitors.¹ Bulwyk was perhaps an early holder of the office afterwards known as the Keepership of the Pew. The image of the Virgin in the Pew would seem thus early to have acquired a peculiar sanctity. It was certainly regarded with special veneration early in the reign of Richard II. The nameless chronicler of Wat Tyler's rebellion relates that on 15th June 1381—the day of the meeting at Smithfield—the king came in the morning to Westminster Abbey, where he 'made his prayer devoutly, and his offering for the altar and the relics; and afterwards he spake with the anchorite, and confessed to him, and remained with him long time'.² Froissart, when describing the same incident, relates that 'Richard went to a little chapel, with an image of our Lady, that worked great miracles, wherein the kings of England have always had great trust'.³ Though Froissart describes it as in the church—meaning Westminster Abbey—it seems likely that he is referring to our Lady of the Pew, and when taken with the narrative of the anonymous English Chronicle we get a suggestion that at this time the anchorite of Westminster had some connexion with the chapel of the Pew. It is a point to which I will presently return.

At a later time the image of the Virgin at our Lady of Pew was famous for the richness of the jewels with which it was adorned. This endowment was certainly as old as the reign of Richard II, for on 6th March 1393 the king granted to the dean and canons of St. Stephen that they should have restitution of all jewels, ornaments, and other church goods recently stolen out of the king's closet of St. Mary de la Pewe, near the new chapel of St. Stephen, in whosoever hands they may be found.⁴ Incidentally this shows that the chapel of the Pew was parcel of the college of St. Stephen, which appears more clearly in a document drawn up in the following year. The dean and canons had for a long time past sought to be released from the jurisdiction of the Abbey of Westminster. The dispute was finally settled on 10th August 1394, when it was agreed that the chapel of St. Stephen, the chapel of St. Mary underneath, a little chapel on the south side then used as a chapter-house, and the chapel 'de la Pewe', should be exempt from the Abbey. The exemption was further extended to cover the habitations

¹ *Cal. Pat. Rolls, Edward III*, xiv, 325.

² *English Historical Review*, xiii, 518.

³ *Froissart*, x, 117, ed. Luce and Reynaud.

⁴ *Cal. Pat. Rolls, Richard II*, v, 244.

and buildings occupied by thirty-eight persons serving God in the chapel of St. Stephen; at the end of the list appear two servitors, namely the verger and the keeper of the chapel of la Pew.¹ This seems to be the first specific mention of that office.

There is one other reference in the fourteenth century which we may identify with the Pew. Pierre Salmon,² the French chronicler, when describing a conversation which he had with Richard II in 1397, relates that the king received him all alone in his oratory in which there was an altar. We have seen how Richard II went to pray at the Pew before his meeting with Wat Tyler, and how there was a suggestion that the Pew was then associated with the anchorite of Westminster. This reminds us that Henry V on the evening after his father's death went secretly to a recluse at Westminster and made confession to him of his past life.³ That Henry should have made his prayerful preparation for his kingly duties at the venerated oratory within the Palace would be natural. With the previous evidence for some association of a Westminster anchorite with the chapel of the Pew, I venture the suggestion that it was before our Lady of the Pew that Henry made the confession which brought his riotous life as prince to a close.

The history of our Lady of the Pew during the fifteenth century is chiefly one of benefactions. The earliest is in 1411, when the executors of John Ware, one of the canons of St. Stephen's, having obtained licence from Henry IV to grant five marks of rent from messuages at the corner of Mark Lane, in Fenchurch Street, to the college,⁴ directed that four marks should be spent for Ware's obit: 'and of the said four marks five shillings shall be applied yearly for the maintenance of a lamp to burn before the image of the Blessed Virgin Mary "in Puwa", on every day from the first opening of the door of the same chapel in the morning till the closing of the same door in the evening.'⁵

Thirty years later William Prestwyk, who, in addition to his offices as one of the Masters in Chancery and Clerk of Parliament, was a canon of St. Stephen's, was minded to make provision for a mass to be celebrated daily within the Royal College or chapel of St. Stephen within the king's palace of Westminster,⁶ 'and

¹ Widmore, *History of Westminster Abbey*, p. 103.

² Salmon, *Les demandes faites par Charles VI*, pp. 45, 46.

³ *Vita Henrici Quinti*, p. 25, ed. Hearne (wrongly attributed to Thomas Elmham). Tito Livio (p. 5), who is probably the original, has 'ad se vocato sacerdote honestissime vite, quodam monacho', not mentioning that he was an anchorite.

⁴ *Cal. Pat. Rolls, Henry IV*, iv, 246.

⁶ *Cal. Pat. Rolls, Henry VI*, iv, 143-4.

⁵ See pp. 18, 19 below.

particularly within the Oratory called "le Pew", belonging to the foresaid college or said chapel, if and so far as that might conveniently be done, or at all events at some other altar within the precincts of the said college or chapel, by one of the vicars of the said college or chapel weekly by the order of their stalls, for his soul, the souls of his relatives and friends, and of others his benefactors named in certain tablets'. He likewise intended to make provision for his anniversary to be kept at St. Stephen's. Prestwyk died before he could give effect to his intentions. But his executors, having acquired the six Wool-houses near the Staple beside the king's Palace, had licence on 16th November 1442 to grant them to the dean and canons of St. Stephen for the fulfilment of Prestwyk's will. They then made ordinance on 4th November 1443, that one of the vicars of the college should celebrate mass daily at the altar of Blessed Mary in 'le Pewe', or that failing at one or other of the two altars in the nave of St. Stephen's chapel, and prescribed the weekly order of the services. Each vicar thus celebrating weekly in turn was to receive by way of reward or salary 12*d.* On Prestwyk's anniversary the 'clerk of Pew' was to receive 4*d.*; the 'clerk of Pew' was probably the same as the keeper; that he was not a person of any importance is shown by the facts that on the same occasion the verger and vicars received 8*d.* apiece.¹

William Lyndwood, the celebrated canon lawyer, at his death in 1446 made provision for a chantry at St. Stephen's, and directed that on his anniversary the keeper of the chapel of Pew, if a priest, should receive 6*d.*, and otherwise 4*d.* In the ordinance for the chantry it was directed that there should be two chaplains to sing mass daily in the low chapel (St. Mary in the Vaults), or one of them there, and the other at the altar of the Blessed Mary of Pewe.²

Early in 1452 came the most noteworthy incident in the history of the chapel of the Pew, probably on 16th February of that year.³ 'The same day the kynge cam out of London a misfortune fell at our lady called de Pew on the Wednesday.

¹ See p. 19 below, and *Antiquities of Westminster*, p. 119.

² *Pat. Roll*, 32 Henry VI, m. 4 'quandam Cantariam perpetuam in bassa Capella de sancti Stephani infra palacium nostrum Westm. de duobus capellanis perpetuis, siue de vno Capellano perpetuo ad minus, diuina singulis diebus in Capella predicta, siue vnus eorundem Capellanorum in ipsa bassa Capella et alter eorum ad altare Capelle beate Marie de Pewa prope dictam Capellam sancti Stephani situate, pro salubri statu nostro et carissime consortis nostre Margarete', &c. See *Cal. Pat. Rolls, Henry VI*, vi, 163. For the anniversary see Cotton MS., Faustina, B. viii, fol. 33 'Custos capelle de Pewa, si presbiter fuerit, vjd., aliter ivd.' See Lyndwood's Will, ap. *Archaeologia*, xxxiv, 418-20.

³ Stow says '17 February', which was a Thursday. Henry VI left London for Northampton on 16th February.

There was a clarke, keper of the ymage dubbed with jewells of precious stone, perle and rings many, no jewellar cowlde judge the price: this clarke taught children thereby, and commanded a childe to put out the candles; beinge negligent there was brent ornaments, golde and golde rings, precious stones, apparayle, that were about that ymage,' etc.¹

The writer of this narrative was one John Piggot, upon whom I will digress a little. Stow in his *Survey of London*² quoted the description of the fire at our Lady of the Pew, and with his characteristic mixture of vagueness and care gave 'John Piggot' as his authority. The reference seemed hopeless, but long after, whilst searching for other matters amidst Stow's chaotic collections in Harley MS. 543, something on an unusually crabbed page caught my eye. On examination I found that the page, which is headed 'Pigot', consisted of memoranda whereof Stow had made use in his *Annales* and *Survey*. I have since printed them in my *English Historical Literature*. In 1458 a John Pygott was vicar of Kemesworth,³ a living in the gift of the Chapter of St. Paul's, and he may conceivably be the author of the *Memoranda*. However, that is mere guesswork, but the *Memoranda* themselves are a gossipy anecdotal record, of a quality rare at so early a date. One obscure reference, of which I have lately discovered the solution, I will here quote. Just before the narrative of the fire at our Lady of the Pew, Piggot has a notice of the abortive expedition to Guienne in 1451. 'The lord Rivers shuld have past the see, but taried at Plimouthe tyll all his money was spent, and then sent to the Duke of Somerset for theyr wages: he sent them the ymage of S. George to be solde, with the almes dishe of the Duke of Glocestar: for coyne had they none.' The 'alms-dish of the Duke of Gloucester' was clearly a notable object, of which one would desire to find trace. Whilst looking in vain for some material for our Lady of the Pew in a Roll of Wardrobe Accounts I had the good luck to light on a reference⁴ to an 'almsdish in the manner of a ship, of silver-gilt, with divers towers and eight men in armour bearing eight banners, to wit of the arms of St. George, of the Earl of Hereford, and of Sir Thomas, the king's son, late Duke of Gloucester'. One can hardly doubt that this was the precious vessel that in the autumn of 1451 was melted down to pay the wages of the mutinous sailors of the fleet.

Stow, who seems to have had other authorities than Piggot for the burning

¹ Kingsford, *English Historical Literature*, p. 373.

² *Survey*, ii, 121.

³ *Visitation of Churches belonging to the Dean and Chapter of St. Paul's*, p. 100, Camd. Soc. 1895.

⁴ L.T.R., Wardrobe, Roll 6, m. 8 'j disca elemosinaria ad modum navis argenti deaurati, cum diversis turribus et viij hominibus armatis deferentibus viij vexilla, videlicet de armis sancti Georgii, Comitis Hereford, et domini Thome, filii Regis, nuper Ducis Gloucestrie'. The date was 1413.

of the Pew, adds that the chapel itself was burnt, but since again re-edified by Anthony, Earl Rivers.¹ This statement is probably correct, for Rivers was certainly a benefactor of the Pew, and had a special veneration for the image of our Lady there. If Anthony was the rebuildier, the date is not likely to be earlier than the marriage of his sister Elizabeth to Edward IV in 1464. The chapel of the Pew was probably rebuilt before the brief Lancastrian Restoration of 1470-1, for on 12th November 1471 the dean and canons of St. Stephen's, having regard for 'the bountiful beneficence towards the work of the Blessed Mary in le Pewe', displayed by Thomas Powtrel,² executor of John Crecy, late canon of St. Stephen's, directed that an anniversary should be celebrated for Powtrel at the same time as the one to be kept for Crecy.

On 10th June 1473 William Botteler made provision for an anniversary to be kept for himself and his parents at St. Stephen's, and directed that the keeper of the chapel of the Blessed Mary 'of Pewe' should, if a priest, receive 8*d*.³

In the winter of 1475-6 Earl Rivers paid a visit to Rome, where he won the favour of Pope Sixtus IV, who invested him with the title of defender and director of papal causes in England. It was probably on the occasion of this visit to Rome that Earl Rivers procured 'of our holy fader the Pope a greet and large indulgence and grace unto the chapel of Our Lady of the Piewe, by St. Stephens at Westmestre, for the relief and helpe of Cristen sowles passed out of this transitorie world; which grace is of like vertue to thindulgence of *Scala Celi*'. For this information about his patron's beneficence we are indebted to Caxton, who recorded it in the epilogue to the *Cordiale*, which Rivers translated out of the French, and Caxton printed at Westminster in February 1478-9.

In 1480 Richard Grene, Master of Arts, being moved to accomplish some good work to the pleasure of God, and to the honour of the most Blessed Virgin Mary, whereby he might provide expiation for his own faults and relief for the souls of his relatives and benefactors, thought this could not be better done than through the daily sacrifice of the body of our Lord at the Altar. And whereas the chapel of the Blessed Mary of Pewe, within the king's Palace of Westminster, was apt for this purpose, since by the frequent manifestation of miracles the efficacy of the prayers of the faithful was there attested, and because manifold indulgences as well in expiation for the living as in relief of the departed did there abound, and in particular that singular indulgence of *Scala*

¹ *Survey*, ii, 121.

² Cotton MS., Faustina, B. viii, fol. 39 'quam eciam ad supradicti nostri collegii vtilitatem affectatam benevolenciam, ac largifluam ipsius ad opus beate Marie in le Pewa exhibitam beneficenciam'.

³ *Ibid.*, fol. 40, 'Custodi capelle beate Marie de Pewa, si sacerdos fuerit, viij*d*.'

Dei or *Scala Celi* there of late granted, he determined to endow a daily mass to be said in the chapel by an unbeneficed priest of virtuous disposition in return for an annual stipend of ten marks. The dean and canons of St. Stephen on 28th July 1480 accepted Grene's benefaction, and agreed to appoint a priest accordingly to say masses daily 'in or by the chapel or oratory of the Blessed Mary, vulgarly called of Pewe'.¹

The record of Grene's benefaction completes our information as to the 'singular indulgence of *Scala Celi*' at our Lady of the Pew. One can hardly doubt that when Rivers was in Italy he had paid a visit to the church of Santa Maria Scala Celi at Abbadia delle Tre Fontane outside the walls of Rome. Santa Maria Scala Celi owes its name to the vision, there vouchsafed to St. Bernard, of a heavenly ladder, whereon angels were conducting to heaven the souls of those whom his prayers had released from purgatory.

The terms of Grene's benefaction and Caxton's description make it clear that this was the origin of the indulgence at the Pew. But one would have liked to trace some analogy between the ancient private chapel of the Popes at the head of the Scala Santa at Rome and the private chapel of the king's Palace at Westminster. If the conjecture made above² that the chapel of the Pew was approached from the cloister-walk by a stairway be accepted, there would be a further point of resemblance. It would of course have been impossible to have had the privilege of the Scala Santa for the Pew, but for what it is worth I make the suggestion that Rivers, when obtaining the singular indulgence of the Scala Celi for the chapel at Westminster, had also in his mind some similarity of character between the chapel of the Pew and the chapel at the head of the Scala Santa. In any case the fact that Rivers was Lord Scales in right of his first wife may have suggested a fanciful reason for his choice.

The Scala Celi was not unfamiliar to Englishmen. At the end of the fourteenth century two London citizens left money for pilgrims to go to Rome and to have masses said for their souls in the chapel of the Blessed Mary called Scala Celi.³ In 1494 Pernell Rogers made a bequest of 33s. 4d. to Sir Robert Bilton to go to Rome and in Scala Celi to sing six masses for her soul, with an alternative bequest in default in favour of our Lady of the Pew.⁴ At a later time the like indulgence was procured by the Lady Margaret Beaufort for Henry VII's chapel at Westminster, which is in consequence sometimes called the chapel of Scala Celi at Westminster. In 1514 Robert Southwell directed that 'shortely after my decease ther be song for my soule onely on masse in the

¹ See p. 20 below.

² See p. 4.

³ *Calendar of Wills in the Court of Husting*, ii, 234, 333.

⁴ P.C.C. 32 Vox.

chapell called Scala Celi in the Monastery of Westminster, the remission, grace and goodness whereof is purchased and attained thither by meane of my ladies grace the kynges grandame'.¹ Four years later William Bedell directed that he should be buried 'at the lower ende of my ladies chapell at Westminster called Scala Celi'—this would not have been possible at the Pew—and went on to will 'an honest preest to synge in my ladies chapell at Westminster called Scala Celi for my soule and for the soules of my lady Margaret, countesse of Richemount, my fader and moder', etc.² Still earlier, in 1513, William Tawley, a citizen of London, had provided for a priest to 'goo to Westmynster to the new chapell of Scala Celi there, disposyng hymself to say masses for my soule'.³ In 1513 the 'new chapel' could hardly refer to our Lady of the Pew.⁴

Anthony, Earl Rivers, was beheaded by order of Richard of Gloucester at Pontefract on 25th June 1483. Two days previously he had made his will at Sheriff Hutton directing 'my hert to be had to our Lady of Pewe beside Seint Stephyns college at Westmynster, there to be buried by thadvyse of the Deane and his brethern, and if I dy be yend Trent, then to be buried before our Lady of Pewe aforesaid. . . . Also I remembre there was a preest claymid to be executor to a boucheer of London callid Lamye, as Andrew Dymmok knowith, and that I shuld owe the same bocheer money, which I will in any wyse be paid; and that therbe a preest founde a yere at our Lady of Pewe, to pray for the sowle of the said boucheer and all Cristen soules'. At the last Rivers directed simply that he should be 'buried before an Image of our blissid Lady Mary, with my Lord Richard, in Pomfrete'.⁵

There is only one more record in the Register of St. Stephen's of a benefaction for the Pew. On 10th August 1498, Master John Brown, late canon of the college, directed that on his anniversary the keeper of the chapel of the Blessed Mary of Pewe was to receive 4*d*.⁶ Fifteenth-century wills, however, supply some instances of the gifts of jewels wherewith the image of our Lady of the Pew was enriched. In 1452 Gerard Heshull, canon of St. Stephen's, bequeathed 20*s*. to the chapel of the Blessed Mary 'de Pwa' within the king's Palace at Westminster to buy some ornament in honour thereof.⁷ In the same

¹ P.C.C. 4 Holder.

² *Ibid.* 8 Ayloff.

³ *Ibid.* 14 Fetiplace.

⁴ The will of Agnes Bounde of Colchester in 1508—P.C.C. 8 Bennett—is less clear than the above. But when she wills for a priest to say mass 'at Westmynster in that Chapell that hath such pardon and indulgence as ys named at Scala Celi', it is probable that she referred to Henry VII's chapel, and not to the Pew. For these references to wills I am indebted to Mr. J. Challenor Smith, F.S.A. The indulgence of Scala Celi was also obtained for the Savoy chapel.

⁵ *Excerpta Historica*, pp. 246-8.

⁶ Cotton MS., Faustina, B. viii, fol. 50.

⁷ P.C.C. 17 Rous.

year John Padyngton willed that Johanna Burgh, widow, should offer to the image of the Blessed Mary at Westminster in the chapel called 'le Lady Pewe' 'that ring of gold, wherewith Agnes, my wife, was betrothed to me'.¹ Much later, in 1486, Christopher Hanyngton directed thirty masses to be celebrated 'incontinent after my deth at oure blesside lady of Pew att Westminster, and over that to yeve in my behalf some thing of myn, as ring, bedes, or gurdill, to the same blessid figure of oure Lady'.²

Another will of interest is that of Pernell Rogers in 1494, to which reference has already been made. If Bilton failed in his mission to Rome, the money was to be given to 'two honest preestes, the oon called Sir Nicholas Rawlenson, thother Sir William Bishop, in equal porcions, eche of them to syng at our Lady of the Pewe in Westmynster at such season as the privilege of Scala Celi is there solemny songen and redde for the soule of the said Pernell'.³ A peculiar description is that contained in the will of William More, of St. Magnus, London, in 1521, for a trental 'at Scala Celi at the Chapell of the Pewe before our lady next saint Edward chapell at Westminster'.⁴

References to our Lady of the Pew as a royal chapel are not unfrequent in the last half-century of its existence. On 29th March 1484, Richard III granted an annuity of ten marks to John Cave, keeper of the chapel of St. Mary de la Pewe, till he was otherwise provided for.⁵ Mention has already been made of how when Henry, Duke of York, was created a knight of the Bath, the new knights 'toke their waye secretly by our Lady of Pieu, through St. Stephen's Chapell, on to the steyr foote of the Star Chambre end'. There are sundry references to the Pew in the Privy Purse expenses of the king and queen. On 9th May 1494 there was paid £2 for the king's offering at our Lady of the Pewe; and in the same year Sir John Bracy, singing before our Lady of the Pewe, had £2 for a quarter's wages.⁶ In March 1502 there was payment in the queen's behalf of 2s. 6d. 'to oure lady of Piewe', and on 7th December following of 6s. 8d. 'for thoffring of the Quene to oure Lady of Pyewe upon thevyn of the Concepcion of our Lady'. In March 1503 Sir Robert Byrche received no less than £6 13s. 4d. for 'singyng at our Lady of Piewe'.⁷

Similar entries appear in the Privy Purse expenses of Henry VIII. Apparently there was a special mass celebrated at our Lady of Pew on All Souls'

¹ Lambeth Series, 273 Kempe. For these last two references I am again indebted to Mr. Challenor Smith.

² P.C.C. 25 Mills.

³ *Ibid.* 32 Vox. See p. 13 above.

⁴ *Ibid.* 22 Maynwaryng.

⁵ *Cal. Pat. Rolls*, p. 451.

⁶ *Excerpta Historica*, pp. 98, 99.

⁷ *Privy Purse Expenses of Elizabeth of York*, pp. 4, 77, 102.

Day. From 1510 to 1519 we have the record of masses on that feast, beginning with January 1511 when Dr. Rawson was paid 28s. for 42 priests singing at our Lady of 'Piewe' on All Souls' Day.¹ In some other years the number of priests singing was even greater, so that the chapel of the Pew cannot have been a very small place. On All Souls' Day, 1514, the king's offering at the Pew was 3s. 4d. On 31st January 1519 the Earl of Devon offered 4d., and on 2nd July 1521 the Duke of Buckingham offered 3s. 4d.² The latest mention of the Pew seems to be on 10th November 1531, when there was paid to the Clerk of the Closet for money in charity at our Lady of the Pew £8 1s. 8d.;³ probably this represented the king's offerings during a prolonged period.

In the previous year Wolsey had been compelled to surrender York Place to the king, and the old Palace of Westminster presently ceased to be a royal residence. With that the Pew lost its first purpose as the king's private chapel. A few years later came the dissolution of the college of St. Stephen, and after a short interval the greater chapel was given over to the use of the House of Commons. The chapel of the Pew was probably about the same time turned to secular uses, and together with part of the adjoining block of buildings was made into a dwelling-house. There Sir Robert Cotton established himself in the latter part of the reign of Queen Elizabeth, and there—perhaps in the room which had been the chapel of the Pew—some of the meetings of the old Society of Antiquaries were held. As already explained, it is probable that the chapel was identical with the room in which Cotton's famous library was kept from its formation till its removal to Essex House.⁴ In the Act of Parliament of 1707, which made provision for the Cotton Library, it is stated that 'the place wherein the Library is kept is a narrow little room, damp and improper for preserving the books and papers . . . nor could there be any passage to the same but through the best rooms in the House'.⁵ It was probably a little later that Sir Christopher Wren was ordered to inspect the room with a view to its repair. He reported to Lord Godolphin that he found it 'in so ruinous a condition that it cannot be put in a substantial repair without taking down and rebuilding a good part of

¹ *Letters and Papers, Henry VIII*, ii, 1449; cf. p. 1454 for masses at our Lady of Pewe on All Souls' Day, 1511, 32s.; p. 1458, the same in 1512, 43s.; p. 1466, for 25 priests singing 25 masses before our Lady of Pew, All Souls' Day, 1514, 16s. 8d.; p. 1469, for 49 priests at 8d. each. And iii, p. 1533, Twelfth Day, 1519, Dr. Rawson for masses at our Lady of Pewe, £15 14s. 3d.; p. 1538, December 1519, mass at our Lady of Pewe on All Souls' Day, 54 priests at 8d. each.

² *Letters and Papers*, i, p. 1469; iii, pp. 51, 497.

³ *Ibid.*, v, p. 756.

⁴ With the exception of a short interval under the Commonwealth.

⁵ See *Report of the Committee of the House of Commons in 1732*, ap. Additional MS. 24932 at the British Museum.

the Dwelling-House'. He therefore recommended that the library should be removed to a 'room over the Ushers near the House of Lords', which he estimated could be made convenient at a cost of £552 6s. 7d.; whereas the cost of rebuilding and enlarging the old room and of 'making good the offices under it with other charges incident in such an old decayed building will amount to at least £1,000,' besides the expenditure of £160 for new presses included in the other estimate.¹ Wren's report seems to show that the Cotton Room—and therefore in all probability the chapel of the Pew—was on an upper floor. Nothing, however, was done till 1722, when the condition of the old room was so bad that the library was removed to Essex House, where it remained seven years. But Essex House being 'surrounded with buildings and therefore in danger of fire',² the library was in 1729 removed to Ashburnham House, where two years later it narrowly escaped destruction. Cotton House, and with it the chapel of the Pew, seems to have been pulled down some time in the eighteenth century, probably not long after the removal of the library.³

¹ Harley MS. 6850, fol. 343. A plan which accompanied the report has unfortunately disappeared.

² *Report of the Committee of the House of Commons in 1732.*

³ It has occurred to me often that by careful measurement of the Cotton Manuscripts, shelf by shelf, it might be possible to restore the arrangement of the room at Cotton House. If this could be done we should recover also somewhat of the ground-plan of the chapel of the Pew. Since this paper was read I have made some investigation of the existing material. But it is clear that the conclusion would be conjectural only, and that the results, though interesting in themselves, would involve questions foreign to the present paper, and requiring fuller discussion than can be given here.

APPENDIX

1. THE KEEPERSHIP OF THE CONSTABULARY AT WESTMINSTER

[From Patent Roll, 21 Henry VI, Part II, m. 15.]

OMNIBUS ad quos etc. salutem. Sciatis quod cum dilectus nobis Johannes Gurney, valettus coquine nostre, habens ex concessione nostra custodiam Constabularie infra Palacium nostrum Westm. pro termino vite sue cum vadiis, feodis, commoditatibus, et omnibus aliis proficuis eidem Custodie aliquo modo pertinentibus, prout in litteris nostris patentibus inde confectis plenius continetur, in voluntate existat easdem litteras nostras in Cancellariam nostram restituere cancellandas, ad intencionem quod dilectus nobis Johannes Beket, vnus valettorum corone nostre, et predictus Johannes Gurney custodiam predictam pro termino vite eorum et alterius eorum diucius viuientis habere valeant: Nos, de gracia nostra speciali et pro eo quod predictus Johannes Gurney litteras predictas in Cancellariam predictam restituit cancellandas, concessimus predictis Johanni et Johanni pro termino vite eorum et alterius eorum diucius viuientis custodiam Constabularie predictae, inter Collegium nostrum Sancti Stephani et privatum palacium nostrum Westm. situate, vnacum vna camera et vno chamino et quadam camera retracta in eadem Constabularia, que quidem Camera vsque le Tresail et Gallerie se extendendo a dicto collegio vsque Capellam beate Marie de la Pewe adiungitur et annexatur,¹ et ab austro versus boream in longitudine, et ab oriente versus occidentem in latitudine se extendit, ac eciam custodiam gardini Constabularie predictae cum omnibus proficuis et commoditatibus custodie Constabularie predictae pertinentibus, volentes et mandantes quod Constabularius Anglie, hostiarii, hospitatores et alii Officiarii nostri quicunque, qui nunc sunt vel qui pro tempore fuerint, quod prefatos Johannem et Johannem cameras, chaminum, gardinum, vadia, feoda, commoditates et proficua pro termino vite eorundem Johannis et Johannis et alterius eorum diucius viuientis habere, et eis gaudere permittant, absque perturbacione, vexacione siue impedimento nostri aut alicuius alterius pro nobis in nomine nostro, eo quod expressa mencio de vero valore annuo custodie, camerarum, chamini, gardini, vadiorum, feodorum, commoditatum, et proficuatorum predictorum, nec de aliis donis et concessionibus eisdem Johanni et Johanni, seu eorum alteri, ante hec tempora factis, in presentibus iuxta tenorem et effectum statutorum et ordinacionum in hac parte factorum, ordinatorum et prouisorum minime facta existit, aut aliquo statuto, actu, ordinacione, siue mandato aliquo modo in contrarium facto, ordinato siue prouiso non obstante. In cuius rei etc. T.R. apud Westm. primo die Januarii.

2. PASSAGES RELATING TO THE CHAPEL OF THE PEW IN THE REGISTER OF ST. STEPHEN'S COLLEGE

[From Cotton MS., Faustina, B. viii.]

(a) f. 20. 31st January 1411. Indenture between Nicholas Slake, Dean of St. Stephen's, and John Legbourn, John Preston, and John Spaynell, clerks, who had licence by Letters Patent² of Henry IV to grant five marks from messuages in Fanchirchestret at the corner of Martlane for

¹ Something seems to be omitted; supply either 'eidem custodie' or 'eidem Constabularie'. See p. 3 above.

² *Cal. Pat. Rolls, Henry IV*, iv, 245-6.

the anniversary of John Ware, late canon of the Chapel. Four marks were to be applied for his obit :

'Et de dictis quatuor marcis quinque solidi applicentur pro sustentacione vnus lampadis ardentis coram ymagine beate Marie Virginis in Puwa annuatim singulis diebus a prima aperi-cione hostii eiusdem Capelle in mane vsque ad clausuram eiusdem hostii de sero.'

(b) f. 28. 4th November 1443. Agreement of John Stopyngton, clerk, Nicholas Neuton, clerk, William Lunseford and John Priour, executors of William Prestwyk, 'clerici, nuper unius Magistrorum Cancellarie excellentissimi domini nostri Regis Henrici sexti, et clerici Parliamento- rum'. They recite Prestwyk's intention :

'Ad honorem omnipotentis Dei ipsiusque cultus augmentum quandam missam perpetuam infra Collegium siue Capellam Regiam preciosissimi sancti prothomartiris Stephani infra palacium Regis Westm., presertim infra Oratorium vocatum le Pewe, prefato Collegio siue dicte Capelle pertinens, si et quatenus ibidem, nullis aliis impedimentis obstantibus, id commodè fieri posset, vel saltem ad aliquod aliud altare infra sceptra dicti Collegii siue Capelle, per vnum vicariorum eiusdem Collegii siue Capelle septimanatim per cursum stallorum suorum pro anima sua, animabusque parentum et amicorum, ac aliorum benefactorum suorum in quibusdam tabulis specificatorum, necnon animabus omnium fidelium defunctorum singulis diebus celebraturam, ac eciam quoddam anniuersarium in Collegio siue Capella predicta per Decanum et Canonicos ac Vicarios et alios ministros eiusdem Collegii siue Capelle annis singulis pro salute anime sue et animarum predictarum consimiliter celebraturum, habiturum et facturum imperpetuum disposuit.'

Prestwyk, who in addition to his other offices was a canon of St. Stephen's, died before he could give effect to his intention. His executors, having acquired the six Wool-houses at Westminster from John Beket and Thomas Carre, who held them for life by royal grant, and having obtained licence from the king,¹ granted them to the dean and canons of St. Stephen's, and made ordinance as follows :

f. 30. 'Quod singulis diebus imperpetuum quando plures misse in Capella predicta solent de more et consuetudine ecclesie celebrari, vnus perpetuorum vicariorum dicti Collegii siue Capelle presbiterorum, qui nunc sunt, vel qui pro tempore erunt, vnam missam ad altare beate Marie in le Pewe ibidem, si et quatenus loco illo id commodè fieri potest, vel saltem obstante causa legitima vel racionabili ad vnum vel aliud duorum altarium in naui dicte Capelle, si non fuerit legitime impeditus, singulis diebus celebret et celebrare tenetur, videlicet die dominica memoriam de Trinitate et missam de die, fferia secunda missam vel memoriam de Angelis, fferia tertia missam de Sancto Thoma Martire vel de Sancto Johanne Baptista, fferia quarta missam de Spiritu Sancto, fferia quinta memoriam de Corpore Christi et missam de Requiem, fferia sexta missam de Sancta Cruce, et Sabbato de Sancta Maria, secundum et iuxta regulam et vsum Sarum. diuersis temporibus anni obseruandam, pro anima Willelmi Prestwyk, clerici Cancellarie Regis et nuper Canonici dicti Collegii, ac animabus Johannis et Johanne, patris et matris eiusdem Willelmi, necnon pro animabus . . . omnium parentum et benefactorum suorum, necnon omnium fidelium defunctorum, iuxta quod continetur in tabulis ad singula altarium predictorum per nos positis vel ponendis, ac de tempore in tempus cum defecerint, vel aliqua impar tabularum defecerit, per vicarios predictos et eorum successores renouandis et reponendis, in quibus tabulis ordo missarum sic celebrandarum, et nomina predictorum

¹ *Cal. Pat. Rolls, Henry VI*, iv, 143-4.

defunctorum inseruntur et specificantur. . . . Quilibet vicarius predictorum septimanatim sic celebrans capiat pro riguardo siue salario duodecim denarios.'

(c) ff. 43-4. 28th July 1480. Benefaction of Richard Grene, 'arcium magister', who desired:

'Ut aliquod bonum opus ad Dei placenciam et beatissime Virginis Marie honorem perageret, dum hanc vitam duceret, quo et sibi culparum expiacionem et meriti accumulacionem, ac animabus parentum et benefactorum suorum releuamen prouideret. Et cum mente voluendo id apcius fieri non posse aut efficacius quam per cotidianam illius acceptabilissimi sacrificii sanctissimi corporis domini nostri Ihesu Christi in sacris ecclesie altaribus oblacionem memorauit. Ac quod magne deuocionis Capella beate Marie de Pewa infra palacium Regis Westm. situata locus erat ad hoc sacrificium sic offerendum apcius, vbi ex frequenti miraculorum operatorum attestacione constat oraciones deuotorum fidelium euidencia facti pluries efficacioris exaudiri: et quod indulgencie multiplures tam pro expiacione viuorum quam pro releuamine defunctorum ibidem copiose habundarent, et presertim illa singularis indulgencia de Scala Dei, alias Scala Celi, nuperrime illuc concessa, qua anime defunctorum pro quibus misse ibidem celebrabuntur expeditius creduntur liberari a pena salubri, ductus spiritu nobis prefatis Decano et Canonicis instancias fecit procuratorias per Magistrum Maculinum Cosyn, factum in hac parte, vt asseruit, mediatorem vt nostris licencia, concessione, simul et prouisione, vnam missam specialem cotidie pro se et benefactoribus suis celebratam perpetuis futuris temporibus habere posset ibidem per aliquem virtuose disposicionis sacerdotem, non beneficiatum aliquo beneficio curam animarum habente, nec ad celebrandum pro anima vel animabus aliquorum vel alicuius pacto aut conducto obligatum, qui decem marcas stipendii a nobis annuatim reciperet, et semper ad arbitrium Decani et maioris partis Capituli dicte Capelle Sancti Stephani eligeretur, retineretur, aut causa racionabili exigente amoueretur.'

The Dean and Chapter agreed to appoint a priest accordingly to say mass 'ad aliquod trium altarium infra vel iuxta Capellam siue Oratorium beate Marie de Pewa vulgariter nuncupatum'.



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EXTRADOS OF NAVE VAULT, RHEIMS CATHEDRAL CHURCH, AFTER THE FIRE

II.—*An unsolved problem in Gothic architecture: the permanent outer roof.* By
the Rev. D. H. S. CRANAGE, *Litt.D., F.S.A.*

Read 22nd February 1917.

THE destruction at Rheims has called attention to a weakness which is found in almost all Gothic churches—the inflammable nature of the outer roof. The inner vault of the cathedral church is intact, but the outer roof was consumed in the great fire of 1914. It was of lead resting on a fine piece of carpentry at an unusually steep angle.¹ The sweep of the roof from end to end was one of the great attractions of the external effect of the church. The present appearance (pl. I) is almost that of a great bath with high walls, for the distance between the two roofs was much greater than in the case of many contemporary churches. The outline of the extrados of the vault is somewhat obscured by the débris which has fallen on to it.

In contemplating such a ruin, which has taken place through fire in other cases also, it is natural to ask whether an outer roof is a necessity, and, if it is, whether there is any suitable way of making it as permanent as the inner vault. I propose to treat the matter historically and to inquire what solutions, or approximations to a solution, have been reached in various countries. It is not an easy subject to study, for access to the upper roofs is often difficult, and architectural writers often ignore the matter entirely.

Some of the early chapels of Ireland have stone roofs which have lasted till the present day. The side walls are composed of courses of masonry which project over each other inwards till they meet at the top. They are very rude attempts with obvious disadvantages and scarcely come within the scope of our inquiry.

In the south of France the commonest roof in the eleventh and twelfth centuries was the barrel or tunnel vault, and the form persisted when groined vaults had become almost universal in the north. The classical example of a great monastic church is that of St. Sernin at Toulouse. The barrel vault is

¹ Viollet-le-Duc, *Dictionnaire raisonne*, article *Charpente*, fig. 14.

strengthened by bold ribs, but these do not really concentrate the pressure on to definite points. The outward thrust is continuous and prevented a clerestory being added. The drawback, however, is offset by the ease with which an upper roof can be omitted. Flags can be laid directly on the vault. If the arch is round, the pitch of the roof must be rather flat, unless a great amount of material is used above the crown. In course of time a pointed barrel vault was used (fig. 1), which made a satisfactory pitch quite easy.

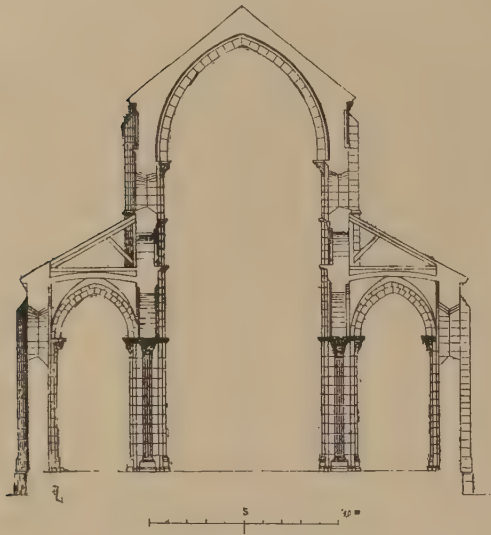


Fig. 1. Section of barrel-vaulted nave. From V.-le-Duc, *Dictionnaire raisonné*, 183.



Fig. 2. Interior of nave, Bolton church, Cumberland.

There are a very few cases in France of the use of transverse barrel vaults, the most remarkable being at the early eleventh-century church of St. Philibert at Tournus, between Dijon and Mâcon. In the nave there are round barrel vaults at right angles to the main axis of the building. Such a disposition of course allowed the insertion of large clerestory windows, for there is no pressure against the north and south walls; but, very naturally at such an early date, advantage was not taken of the possibility. The windows are quite small, and there is no external indication of the very unusual vault. It would have been quite easy to have a series of sloping roofs laid directly on the barrels, but there is an upper wooden covering of the ordinary type. Perhaps the curious appear-

ance of a succession of continuous gables was thought to be intolerable. The barrel arrangement at Tournus has many of the advantages of the groined vault, but its appearance is heavy and clumsy and it was scarcely copied elsewhere.

In England the barrel vault is not common over wide spaces, but there are a few cases where it is used and where an upper roof is omitted. This is the form at St. Catherine's chapel, Abbotsbury, though the pointed barrel vault is



Fig. 3. Staindrop church : S. porch.



Fig. 4. Staindrop church : SE. sacristy.

masked by its decoration of fifteenth-century panelling. Of the same period is the nave of the village church of Bolton, near Wigton, Cumberland. The pointed barrel vault is perfectly plain and has no ribs (fig. 2). There are small north and south transepts, covered by half-barrel vaults. These, and the similar roofs over the north and south porches, act as abutments to the main vault. The windows east of the porch rise above the spring of the vault, and Welsh arches therefore become necessary. The chancel roof is of wood, but the nave vault was intended to have flags laid directly upon it. This was the actual arrangement till the middle of the nineteenth century, when wooden beams were inserted

to separate the vault from the outer roof. The reason doubtless was that water was coming through. In our northern climate it was probably impossible in such a roof to keep out the wet with the materials which the medieval builders had to use. The problem was not so difficult in the south.¹ There are plenty of English examples on a smaller scale, especially in porches. At Staindrop, near Darlington, the roofs of the south porch (fig. 3²) and the south-east sacristy (fig. 4²) date from the fourteenth century and are of this type. The latter is a half-barrel vault and both are strengthened with ribs.

The roof in question is more common in Scotland and is used over wide spaces. The most famous example is at Rosslyn chapel, where there is no attempt to straighten the extrados, which is rounded like the intrados. The same form occurs elsewhere, notably at Sebenico on a very bold scale.³

Stone roofs of an interesting character occur at Bellingham in Northumberland, Minchinhampton⁴ in Gloucestershire, Leverington and Willingham⁵ in Cambridgeshire, and over the Exchequer at Merton College, Oxford.⁶ They are not vaults, but consist of stone slabs laid on arches which span the building at regular intervals. The form can only be used on a small scale, unless, as in Syria, very long slabs are available.

In Périgord there are several remarkable domed churches, the best known being St. Front at Périgueux. Such a construction readily dispenses with the necessity of an upper roof. At Loches,⁷ near Tours, is a form which is probably unique. There are two octagonal spires or pyramids open to the nave below them, in addition to two towers which are also crowned with spires. The appearance reminds one of the conical tops of our English chapter-houses, a shape which is made possible by a complicated mass of carpentry above the groined vault. It would not be difficult to build a spire-like upper roof to such chapter-houses as in the 'chapelle funéraire' at Montmorillon,⁸ near Poitiers.

So far I have been dealing mainly with examples which are either Romanesque in form and date or survivals of Romanesque character after the Gothic

¹ 'Dans le Midi, où il ne pleut guère, . . . ce système avait beaucoup d'avantages. Mais dans les pays pluvieux, dans ceux où les édifices ont été couverts de toitures en tuiles mal entretenues, ou de pierres de nature poreuse, il permet à l'humidité d'exercer ses ravages dans les voûtes.' Lasteyrie, *L'Architecture religieuse en France à l'époque romane*, p. 340.

² From photograph by the Rev. T. Romans.

³ T. G. Jackson, *Dalmatia, &c.*, i, 378-405 and pl. xii, xv.

⁴ Francis Bond, *Gothic Architecture in England*, figs. on pp. 286, 287; A. T. Playne, *Minchinhampton and Avening*, plates opposite pp. 49, 52.

⁵ Rickman, *Styles of Architecture in England*, fig. on p. 218.

⁶ Aymer Vallance, *The Old Colleges of Oxford*, p. 22.

⁷ R. J. Johnson, *Specimens of Early French Architecture*, pl. 89.

⁸ Gailhabaud, *Monuments anciens et modernes*, pl. i and ii of Montmorillon series.

period had set in. In dealing with Gothic architecture, one is immediately faced with the difficulty of defining the term. I have no intention of embarking on a discussion of it here, but most would agree that it includes at least the following two characteristics—the normal use of the arch and especially the pointed arch, and concentration of pressure at certain points. The pointed groined vault, with its outward thrusts met by flying buttresses, is a leading characteristic of the best Gothic work. I will now therefore consider build-

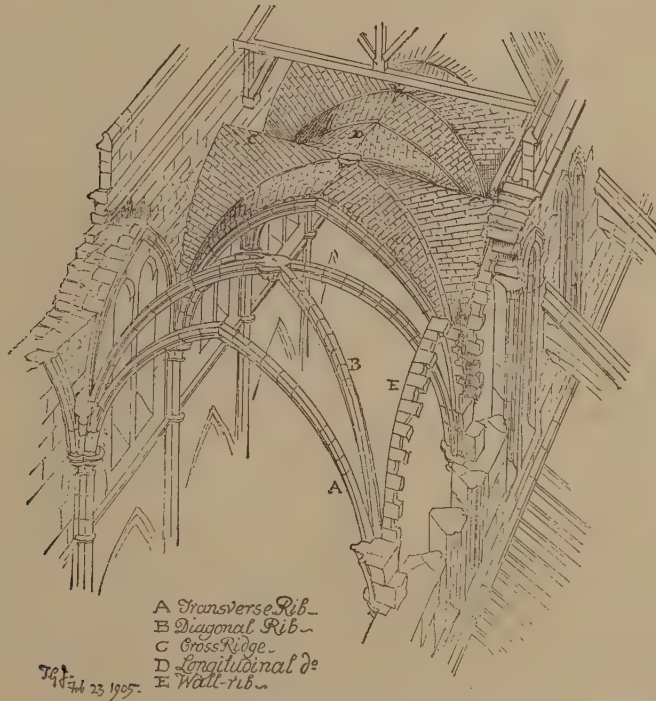


Fig. 5. Extrados of a simple Gothic vault.

By permission of Sir T. G. Jackson, Bt., R.A., F.S.A., and the Cambridge University Press.

ings with groined vaults and the possibility in them of avoiding a perishable upper roof.

The extrados of a simple Gothic vault is shown in Sir Thomas Jackson's very clear drawing (fig. 5). All or nearly all Gothic vaults have their 'pockets' at least partly filled up. The 'breaking point' of an arch, one-third of the way from its spring, needs strengthening, and this is the natural way of doing it. The external appearance of such a vault is unsightly, and for that reason alone it would be natural to hide it. When the walls are built up, as in the drawing, water would collect in the pockets if the vault were exposed to the weather and

holes in the walls would be necessary to let it out. This is not an uncommon arrangement in Cyprus, notably in some of the smaller churches at Famagusta and in the cathedral church of St. Sophia at Nicosia (pl. II). The omission of an upper roof in this case is evidently deliberate. The vault is only roughly covered with concrete, for it can scarcely be seen from below: there may have been originally a layer of flags or tiles. In the climate of Cyprus there would be no great difficulty in keeping the building water-tight, but torrential rain must be guarded against. Not only therefore are there holes at the bottom of the pockets leading to channels on the top of the flying buttresses, but in each case 'deux archères qui flanquent la tête des contreforts et servent de trop plein aux noues, en cas d'engorgement de l'orifice de l'aqueduc, ou pour le cas où les pluies diluviennes de Chypre prendraient une intensité tout à fait exceptionnelle'.¹

A similar treatment of the vault is not uncommon in Spain, but it is not certain that in any case there was no upper roof originally. Mr. Street² specially mentions Toledo, the Barcelona churches, and the collegiate church at Manresa. The appearance is far from satisfactory, especially when there is no gable, as in the west front of the church of Santa Maria del Mar at Barcelona (pl. III).

In Portugal the absence of an upper roof is quite a common feature. At Batalha, for example, 'the stone vaults of the church are also covered with a roof of the same materials, composed of large square flags about the thickness of the leaf of a strong table, and *rebated* at the edges: thus an everlasting roof is formed, that will bear to be walked over, swept, and cleansed of every dirt, contracted by the accumulation of years'.³

In all these cases, whether the omission of an upper roof is intentional or not, it is scarcely possible to see the top of the vault from the ground. In the south of France, however, there are several examples, where no upper roof was ever intended, and where a feature is made of the lower one by covering the extrados of the vault with sloping sides, not unlike the roofs in the same district where the barrel vault is used. One of the best instances is the thirteenth-century abbey church of Vignogoul, near Montpellier (pl. IV). The vaulting is domical, the wall-arches being decidedly lower than the groins. The arrangement is described to me as follows by Monsieur Joubin, Director of the Musée Fabre at Montpellier and Professor in the University:

'Vignogoul est une église gothique, construite entre 1211 et 1220; c'est la plus

¹ Enlart, *L'Art Gothique et la Renaissance en Chypre*, i, 119.

² G. E. Street, *Gothic Architecture in Spain*, pp. 238-9, 302, 342.

³ *The Church of Batalha*, second edition, 1836. Description by Father Luis de Sousa, translated by James Murphy.



THE CATHEDRAL CHURCH OF ST. SOPHIA, NICOSIA

(From Enlart, *L'Art Gothique . . . en Chypre*, II, pl. iv)

Published by the Society of Antiquaries of London, 1917



WEST FRONT OF SANTA MARIA DEL MAR, BARCELONA

(From Chapuy et Ramée, *Moyen Âge monumental*, etc., II, 220)

ancienne église gothique du midi de la France. Les voûtes sont construites sur croisées d'ogives. Le dallage de la toiture est posé directement sur les reins des

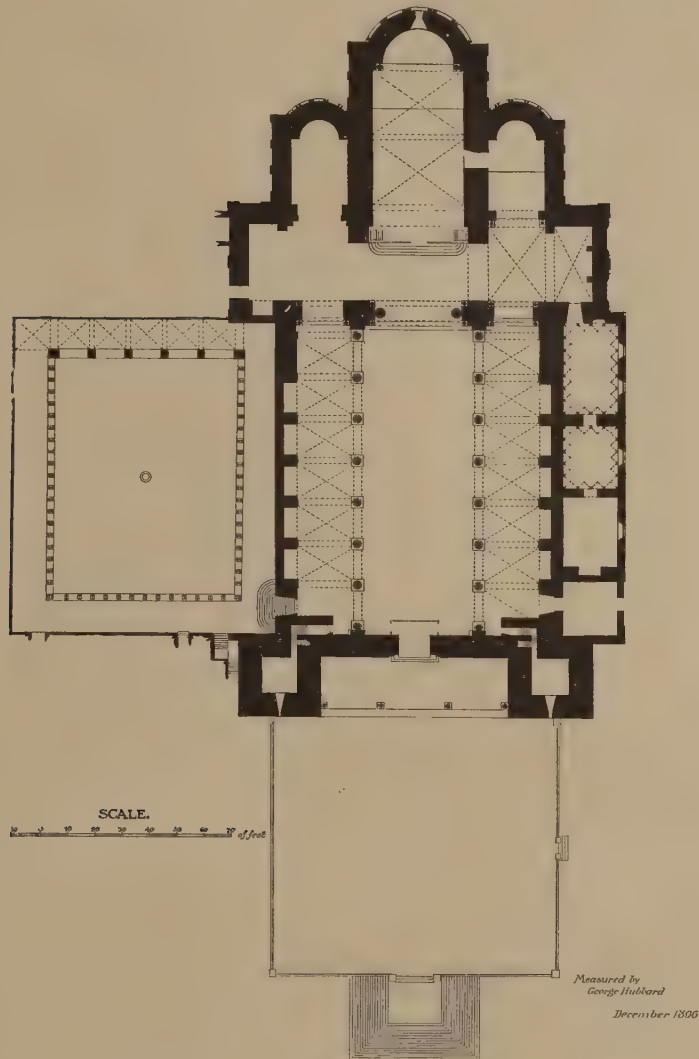


Fig. 6. Plan of Cefalù cathedral church.

voûtes . . . La toiture, vue de profil, constitue une série de pignons, et le dallage présente l'aspect d'un véritable emmanchement. L'écoulement des eaux est obtenu au moyen de gargouilles établies à la hauteur de chaque doubleau.'

At Maguelonne, in the same Department, the transepts of the cathedral church

28 AN UNSOLVED PROBLEM OF GOTHIC ARCHITECTURE:

have groined vaults, with the pockets filled up to make a flat top.¹ This may have been useful for defence,² but of course such filling up would cause a serious weakening of the vault if adopted on a large scale. In the same place there is, dating from the fourteenth century, 'une petite construction voisine de la cathédrale',³ where the arrangement of the roof is similar to that at Vignogoul, except that the vaulting is not domical. At Saint-Pargoire, also a few miles from

CEFALU CATHEDRAL, SICILY.

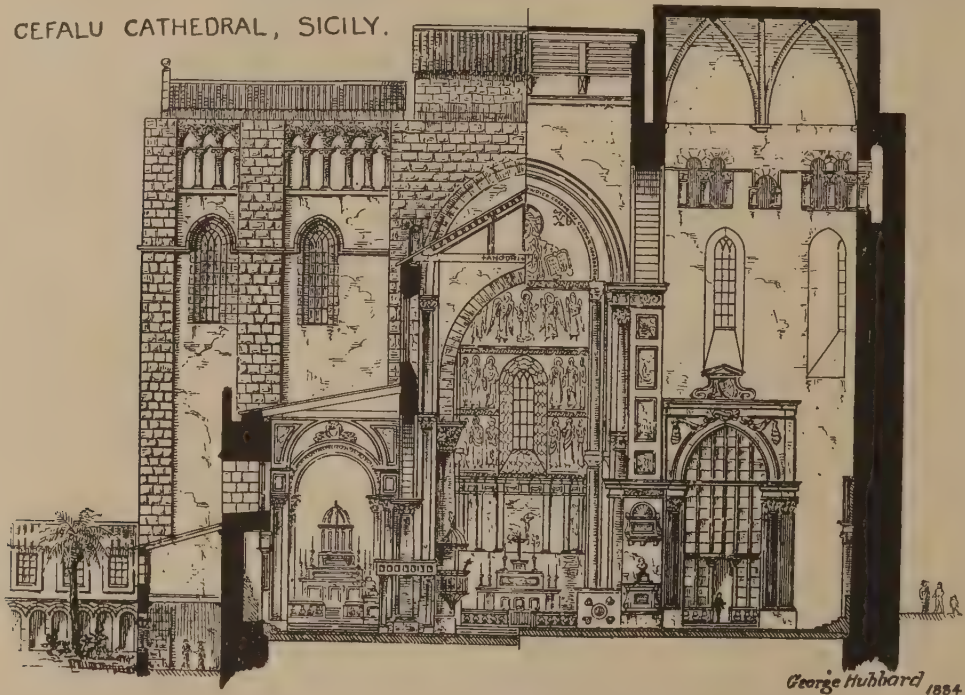


Fig. 7. Cefalù cathedral church : section.

By permission of the Royal Institute of British Architects.

Montpellier, there appears to be a Welsh vault covered with slabs and having a series of gables along its side walls:⁴ the date is fourteenth century. Enlart⁵ gives other examples of this direct covering at Montfavet, Montmajour, Ville-neuve d'Avignon, Arles (église de l'Observance), and in Italy at Valvisciolo and Montelabbate.

¹ Révoil, *Architecture romane du midi de la France*, vol. i, pl. xlv.

² 'Sa toiture dont la pente était extrêmement faible constituait une large plate-forme dallée, et sans doute crénelée, qui pouvait recevoir de nombreux défenseurs, voire même des machines de guerre.' Lasteyrie, *op. cit.*, p. 375.

³ See engraving on p. 361 of the proceedings of the *Congrès archéologique de France*, 1868.

⁴ See fig. 13 on p. 50 of Enlart, *op. cit.*

⁵ *Ibid.*, p. 50.



THE ABBEY CHURCH OF VIGNOGOUL, NEAR MONTPELLIER

(From *Voyages pittoresques . . . dans l'ancienne France*)

Published by the Society of Antiquaries of London, 1917



CEFALÙ CATHEDRAL CHURCH: EAST END

Published by the Society of Antiquaries of London, 1917

These southern examples are of no great size or importance, but they constitute a serious and by no means negligible attempt to solve the problem of the permanent roof.

In only one instance, so far as I am aware, do we find the builders of such roofs giving a curved outline to the upper surface—at Cefalù in Sicily. A paper on the church was read before the Society on 27th January 1898 by one of our Fellows, Mr. George Hubbard. He there claims the early date 1132 for this remarkable building, though it has pointed ribbed vaults over the quire, nave aisles, and south transept. The nave and north transept are not vaulted (fig. 6). Above the vaults of the quire and nave aisles are wooden roofs of the ordinary type, but the south transept has no upper roof. The groined vault is extremely domical: there are no wall-ribs, the vaults evidently leaving the wall at a much lower level than the groins (fig. 7). The external appearance is that of a pointed barrel vault, but this is obtained by filling up the pockets with concrete and so forming a solid mass which would be of dangerous weight if the supporting walls were not enormously thick (pl. V): the extreme width of the transept is about 30 ft.

A different solution of the problem is attempted at the collegiate church of Lincluden, near Dumfries, dating from the early part of the fifteenth century. The quire is planned to have a groined vault with a low chamber above, surmounted by a pointed barrel vault strengthened with ribs.¹ A restoration of the east end by Mr. Thomas Ross, and kindly given to me, is shown in fig. 8. The ribs of the barrel vault start in the pockets of the groined vault and are in *tas de charge* to the height of the dotted line. It is not certain if the upper vault was curved above or sloping: both arrangements are shown in the drawing. The side walls have large windows with buttresses between, an appropriate form to combine with the groined vault, but quite illogical with the upper barrel vault.

At first sight St. Mirin's chapel at Paisley Abbey seems to be on the same principle as Lincluden, but the lower vault is really of the barrel type and not groined as its ribs would lead one to suppose.²

The abbey of Thoronet, in the Department of Var, has a groined vault for the chapter-house, over which is the dormer with a barrel vault of the usual southern French type.³ The church of Le Thor, in the Department of Vaucluse, has a groined vault of rather low pitch.⁴ There is no upper roof, the space between the middle of the vault and the apex being filled with a narrow pointed

¹ Macgibbon and Ross, *The Ecclesiastical Architecture of Scotland*, ii, 393 and figs. 800, 802.

² *Ibid.*, ii, 23-25 and fig. 965.

³ Révoil, *op. cit.*, ii, pl. xvi.

⁴ *Ibid.*, ii, pl. lvii.

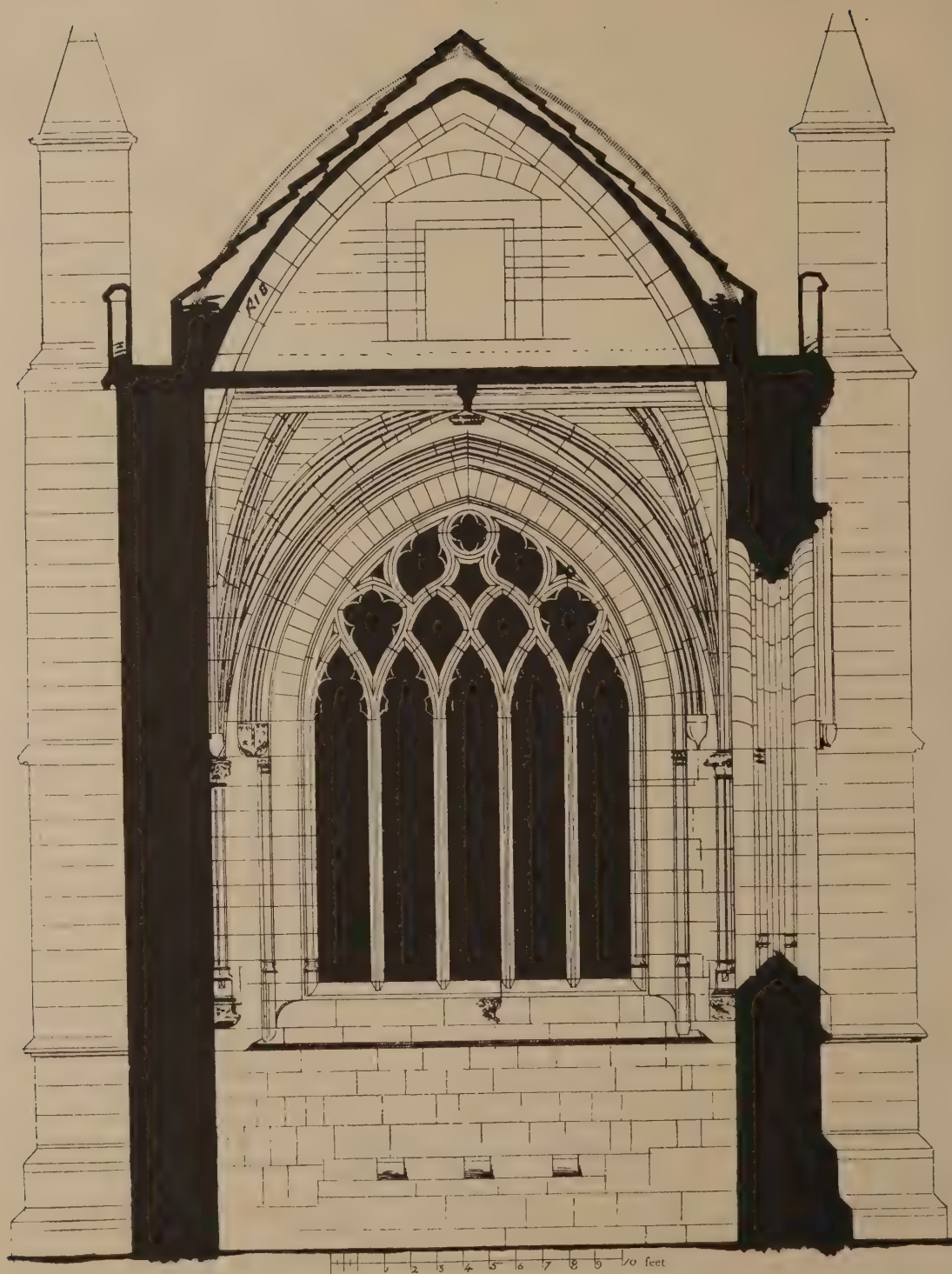


Fig. 8. Lincluden collegiate church : east end.

barrel vault. This has the fundamental weakness of bringing weight on to the haunches of the vault where it is least able to bear it.

It is clear that the double vault, groined and barrel, cannot be a satisfactory way of solving the problem. The abutments cannot be concentrated and continuous at the same time.

A solution of much interest is attempted in the great cathedral church of Liverpool now in course of construction. Truro has the ordinary wooden upper roof, but Liverpool boldly uses reinforced concrete in the quire and transepts: the Lady Chapel is covered with copper, but the supports are of wood. Mr. G. Gilbert Scott has kindly lent me the section of one of the transepts shown in fig. 9. The vault is rather domical. Above it is a low-pitched roof of reinforced concrete resting on ridge-pieces and purlins of the same material: the outer covering is of copper. The ridge-pieces and purlins in turn rest on walls which, except at the ends, rest on arches going across the building.

By using such a low pitch the architect has deliberately refused to make a prominent feature of the upper roof. A horizontal rather than vertical emphasis may harmonize better with the massive but not relatively lofty central tower. If, however, a high pitch is given to such a roof, have we not here a perfect solution of the old problem? We have the assurance of the best engineers that it *would* be permanent, it throws off rain and snow efficiently, and its external appearance can be the same as was the glory of Rheims and Ypres. Can we doubt that the medieval builders, always receptive of new ideas, would have used the material if they had known of it?

Here we come to controversial ground, and I shall not carry all architects and antiquaries with me in contending that the solution is not satisfactory; for I hold that the upper medieval roof was a weakness, not only because it was of wood and inflammable, but because it was tensile. It marred the compressile unity of the building.

The two greatest styles the world has ever seen, by almost universal consent, are the Greek and the Gothic. The Greek developed the depressile principle, the lintel, to its highest perfection. The Gothic did the same for the compressile principle, the arch. Surely, therefore, if the whole roof of a Gothic building were compressile, we should have greater artistic unity than if, as at present, there is a mixture of the arch and the tie-beam. The supports and abutments of a Gothic building are intended for concentrated weight and thrust. The vault governs the whole structure. The best French churches would stand on pillars and buttresses alone, and the walls become mere screens from the weather. A tensile roof, whether of wood or reinforced concrete, introduces a disturbing factor, even if hidden from sight. Great weight is conveyed to the

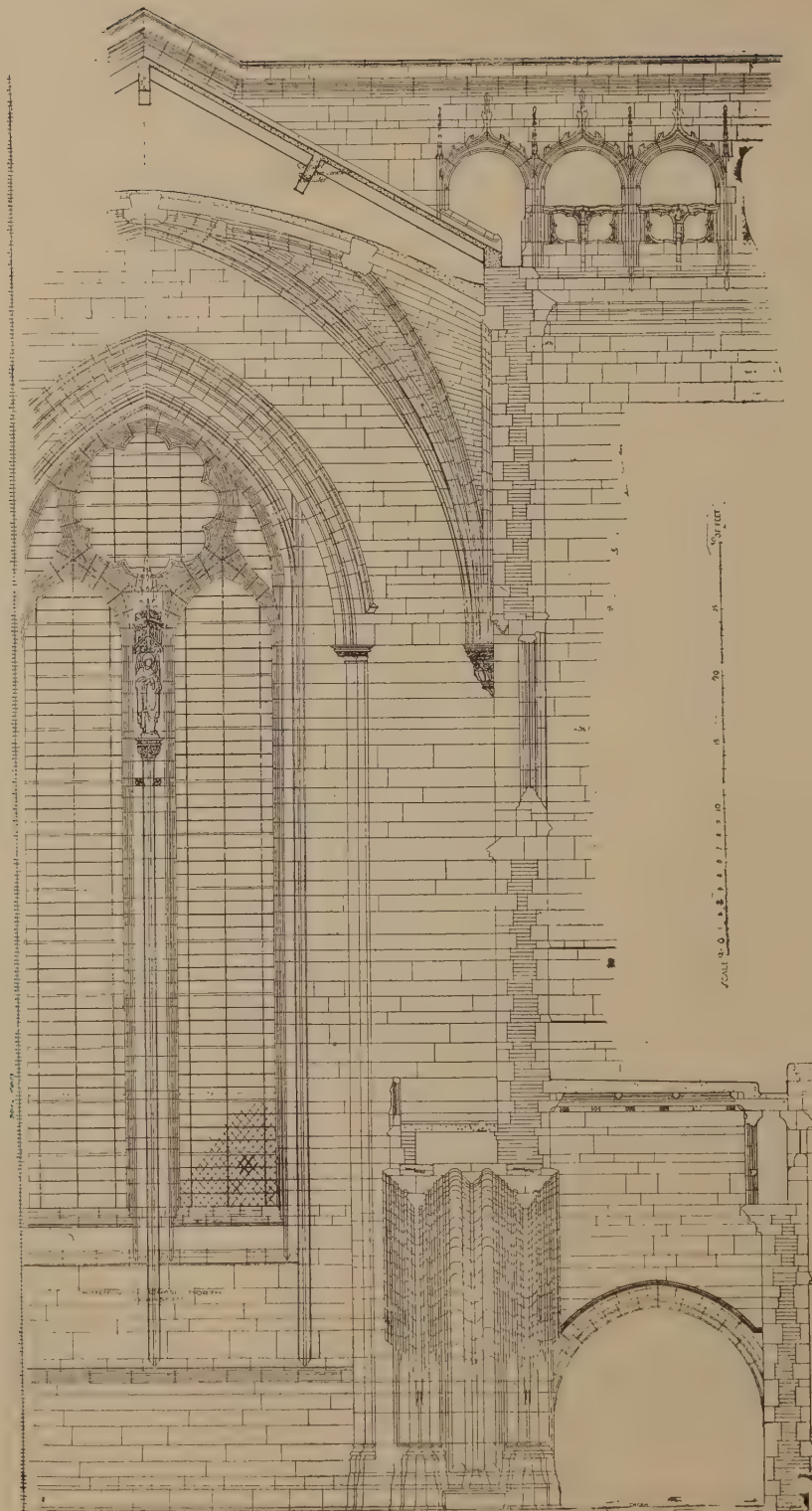
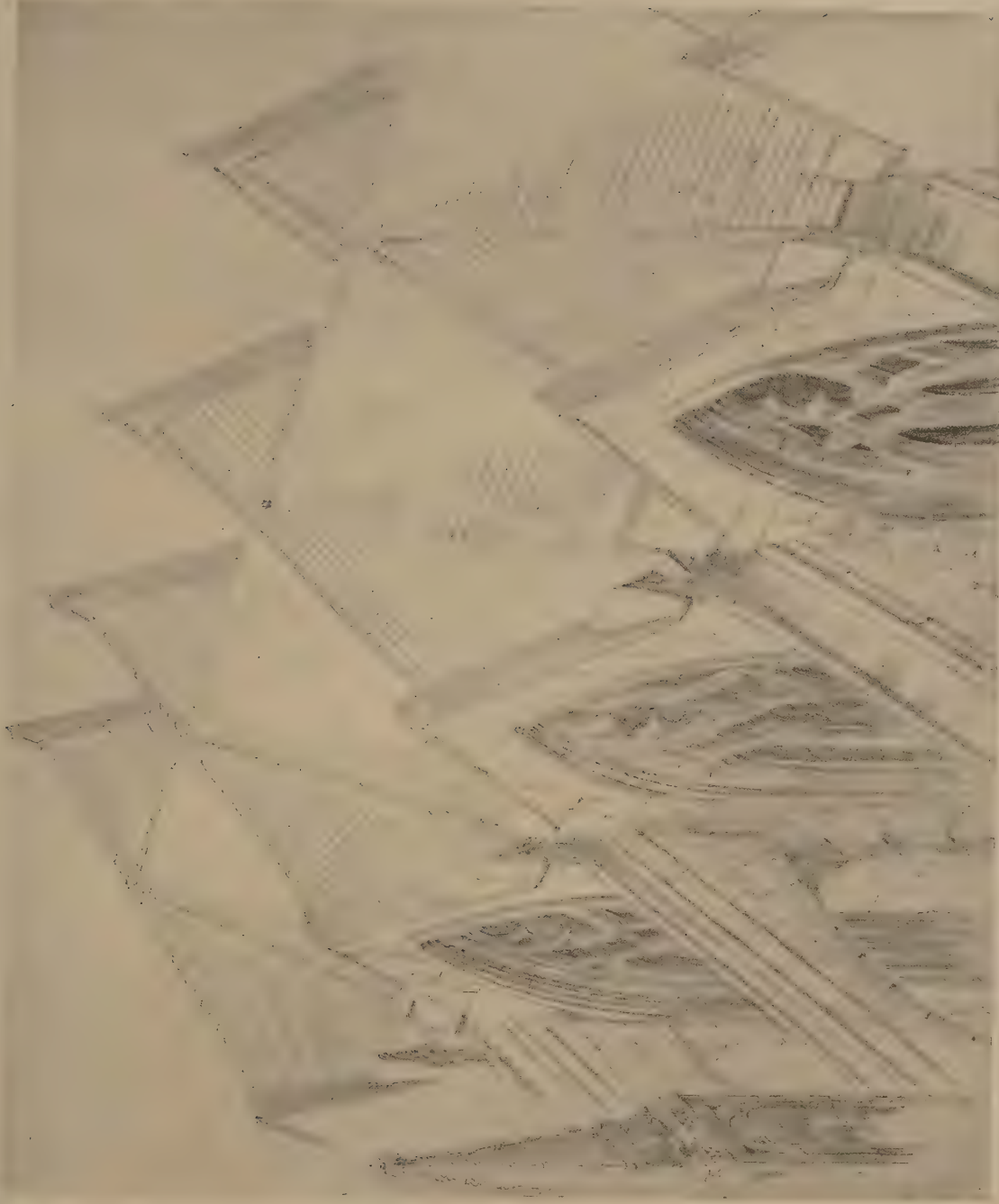


Fig. 9. Liverpool cathedral church : section of transept.

By permission of Mr. G. G. Scott, F.R.I.B.A



From a drawing by Mr. George Hubbard, F.S.A.

THE PERMANENT OUTER ROOF: A SUGGESTION

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wall as a whole by the purlins and ridge-pieces. Buttresses and pillars to support them against end walls would interfere with the window scheme, which has been evolved for a compressible building. I am far from suggesting that the tensile principle may not give rise itself to a great school of architecture.¹ I am merely contending that the compressible and the tensile do not harmonize in a Gothic building.

As regards the particular case of Rheims, different views may be taken. Some will think that it is best to leave the upper part as it is, at any rate for the present, merely making the vault water-tight and providing access from the pockets to outer gargoyles. The vault would then remain entirely hidden by the side walls, which, with the fine parapets above, are far from unsightly. Others will think that, as soon after the War as possible, the upper roof should be 'restored', particularly as the end gables are now meaningless.

Of course it would be possible, with modern methods of construction, to build a water-tight vault for any Gothic church, and then to hide it by side and end walls. Late medieval roofs are often almost invisible from the ground outside. But there is an instinctive feeling against such a course: in our northern climate especially we hanker after the bold sloping roof which seems to tell of warmth and comfort within. Still less do we want to erect the sham front which is such a serious flaw in Italian Gothic architecture.

Is it not possible to get a satisfactory effect by frankly leaving the vault to tell its own tale, merely covering it in a sloping way as the barrel vaults of the south of France are covered? We have seen this on a small scale at Vignogoul and in the chapel at Maguelonne. It has never been attempted in a large Gothic church, for the Portuguese and Cypriote examples, to say nothing of the doubtful Spanish ones, can scarcely be seen from the ground. But is there any reason why it should not be? The pitch must be acute, a truly Gothic characteristic: with a low pitch, the roof would hardly be seen, and the prominent filling up of the pockets would be aggressively ugly. Mr. George Hubbard has kindly made the accompanying drawing to illustrate my meaning (pl. VI).

This paper is mainly for antiquaries, and I have been chiefly concerned with the past rather than the future, but I did not like to close without a practical suggestion which I commend to all who are interested in the problem. Some may regard the proposed solution as intolerable from the aesthetic standpoint, but I would venture to suggest that this may be because we are all accustomed to the continuous roof rather than to the series of gables and slopes. I can think of no insurmountable structural objection. The stone can be covered with

¹ See the invigorating treatment of the whole subject in Mr. Lacy Garbett's *Principles of Design*.

asphalt, lead, or copper and so be quite impervious to the weather. The water is collected above the filling of the pockets and is taken down the channels on the flying buttresses.

On the one hand, therefore, the proposed roof would be permanent and efficient for its purpose: on the other it would be simple and compressible. It would not suit fan or elaborate groined vaulting, with which forms the masonry over the vault would either be great in quantity or fussy in outline. With the simplest form of pointed ribbed vaulting there would be no such difficulty. The steep pitch would tend to economy of material, as it does in a pointed barrel vault. Steepness of pitch, economy of material, visibility of construction, concentration of pressure; are they not all, in conjunction with the arcuated form, genuine Gothic principles? Why should they not all be combined in a permanent outer roof?



TAPESTRY PANEL (c. 1400)

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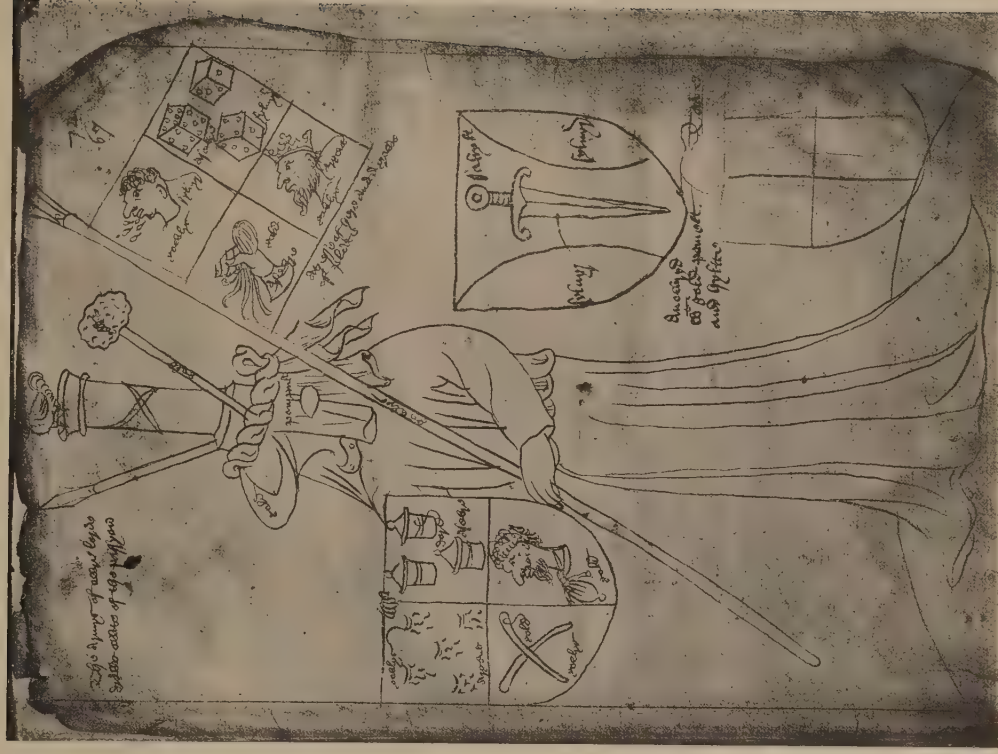
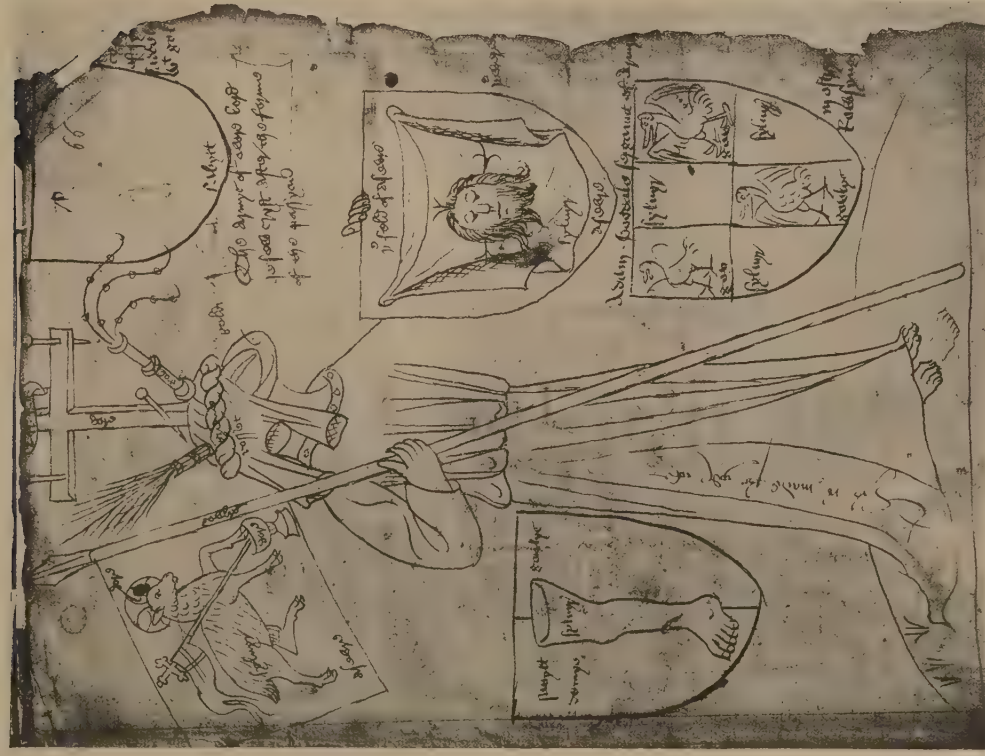
III.—*On a panel of tapestry of about the year 1400 and probably of English origin.*
By SIR CHARLES HERCULES READ, LL.D., F.B.A., Vice-President.

Read 15th March, 1917.

THE piece of tapestry that forms the subject of this communication has but the shortest of histories (pl. VII). It formed part of the Heckscher Collection sold at Messrs. Christie's in 1898; and, attracted by the interesting character of the subject and the admirable preservation and brilliant colouring of the fabric itself, I secured it soon after the sale as it was on the point of going abroad. The Heckscher Collection was brought together in Vienna, and was of a miscellaneous character, containing some very fine works of art, among them an unusually perfect crosier head by Frère Hugo, the famous Flemish goldsmith, which I was fortunate in securing for the British Museum. It is hardly necessary to say that although the collection was formed in Austria, the objects composing it had been derived from a variety of sources, not least from England, as e. g. a Rhenish enamel formerly in the Beresford Hope Collection. No indication is given of the source whence the tapestry was derived. Since it has been in my possession it has been seen by a great number of my colleagues in continental museums and elsewhere abroad. All of these, French, German, Swiss, Flemish, and Spanish, were greatly intrigued as to its country of origin, but in every case each felt sure that it was not a product of his own country. Thus the panel acquired an added interest, and I had a photograph made, and circulated it among a limited number of authorities on the subject, both in England and abroad. The result, as far as the foreign authorities were concerned, only served to confirm the opinions that had previously been expressed; the English opinions varied from an English origin to a Swiss or German. As the experts in the two latter countries would have none of it, and presumably they would be good judges, these two countries, equally with France and Flanders, may be dismissed. Professor Prior, on whose judgement on a point of style I should be inclined to rely, leant towards England. Thus the matter stood when the Burlington Fine Arts Club announced a forthcoming exhibition of medieval heraldic art. It seemed to me that some useful opinions might be obtained if the tapestry were shown there, and I accordingly offered it to the Committee. During the exhibition it excited interest and comment. Sir Claude Phillips, writing in the *Daily*

Telegraph, called it 'the finest and most striking work of art in the exhibition', and adds, 'the composition is exceedingly dramatic, the technique decidedly finer than that of the contemporary German tapestries. . . . To a school which within a period of twenty years produced two such masterpieces as this panel of tapestry (1400) and that world-famous painting, the Wilton diptych (c. 1381), must be given a higher place in the art of the time than we at present accord to it.'¹ For myself, I should hardly have placed the tapestry on so high a plane in the artistic sense, but it is not the less gratifying to find so competent a judge as Sir Claude Phillips ready to concede such high merit to an object that I had bought for its artistic qualities. Its inclusion in the exhibition had, however, other results of a kind not depending upon artistic judgement or appreciation. One of these was the suggestion that the tapestry had been made for the Augustine priory of Pentney in Norfolk, the arms of which are those of the Magdalen as shown in the tapestry itself, and the dedication exactly conforms to its subject, viz. the Holy Trinity, the Virgin, and St. Mary Magdalen. Until an inventory of the goods of the priory in the early years of the fifteenth century be forthcoming, one can only regard this as a possibility, and as adding to the probability of the work being English. Another suggestion, due to the ingenious and fertile brain of Mr. Oswald Barron, has a greater weight on this latter question. In the Introduction to the Catalogue of the Burlington Club Exhibition he stated that in a manuscript in the British Museum (Harl. 2169), an armorial of English work of the time of Henry VI, were figures showing the same helm and crest of the Passion as are borne by the angel standing behind the figure of the Virgin. I proceeded at once to compare these figures with the tapestry, and the annexed block shows how nearly identical they are (pl. VIII). It is fortunate in this respect that the herald who compiled the armorial thought it necessary to repeat the figure wearing the helm on the following page, for the helm and mantlings are essentially the same in both, a fact that seems to me to show that he considered the type normal. There is no need here to labour the singular resemblance between these details on the tapestry and on fol. 72/67 of the manuscript. The absence of the cock of St. Peter on the column in the tapestry may be due to the upper edge having been cut; the other point, that the subject is reversed, is practically immaterial, for the whole tapestry is evidently reversed, as witness the **INRI** on the cross and the wound in our Lord's side, on the left instead of the right. The other features of the composition do not suffer by being reversed, unless conceivably the Virgin should have changed places with the Magdalen in relation to the central group.

¹ It will not be forgotten that there is no small diversity of opinion as to the nationality of the Wilton diptych. I myself have always been disposed to regard it as being English, but authorities of no small weight think it to be foreign.



THE ARMS OF THE PASSION
 (Brit. Mus. Harl. MS. 2169, ff. 71/66 and 72/67)
 Published by the Society of Antiquaries of London, 1917

The similarity of these features in the tapestry to the manuscript, features, it should be noted, far more remarkable than any others in the whole composition, are sufficient to provide a *prima facie* case for an English origin for the whole design, and to throw the onus of proof to the contrary upon those who believe the work to be other than English.

Apart from this evidence, which one may call specific, there are other features which in my judgement help to lead us to the same conclusion. The faces of the two Persons of the Trinity have an unusually calm expression, an immobile placidity that I have always considered to be an indication of English work of the fourteenth and fifteenth centuries, as distinct from the French productions of the same time. The French faces of the fourteenth century in particular have almost always a simper or smile: this can be seen constantly on the small ivories, and to a degree on the larger sculptures. In England this expression is more often absent than present—in France and in French work the converse is the case. Yet another feature, also pointing the same way, is to be found in the remarkable anatomy of the figure of our Lord, in particular the inordinately small waist and the odd and inelegant drawing of the feet. Both of these peculiarities are to be found constantly in a contemporary group of works of art that are notoriously native both in general design and in detail, viz. the Nottingham alabaster tables (fig. 1). In them also may be often seen that placid type of face that I like to think is characteristically English.¹ The wings of the angels are more English than foreign; the same vigorous treatment is to be found on many examples in Prior and Gardner's work, at Westminster, Hawton, Notts., on the Percy tomb, the Gosberton tomb, at Blakeney, at Swine, and on the Suffolk tomb at Ewelme.²



Fig. 1. Nottingham alabaster.
The Crucifixion.

This in effect is the evidence in favour of the native origin of this panel, some of it direct and positive, some inferential and a matter of opinion. My colleague, Mr. J. P. Gilson, considers the style in favour of England; his colleague, Mr. Herbert, is unwilling to say that he sees anything specially English about

¹ The annexed block from an English alabaster table in the possession of Dr. Philip Nelson, F.S.A., illustrates these points, and there seems to me also great similarity in other respects between the faces and those in the tapestry, e. g. that of the Virgin and of the angel holding the cross.

² *Medieval Figure Sculpture in England*, figs. 82, 19, 370, 420, 501, 518, 526.

it, while Mr. Baird Wood, also of the Department of Manuscripts, takes the contrary view, and agrees with Mr. Gilson. Monsieur Bacri of Paris, an 'expert' in such matters, thinks it Swiss; on the other hand, Dr. Burckhardt of the Historical Museum at Basle, who makes a special study of Swiss tapestry, says he never saw a Swiss piece anything like it, and thinks it English. Mr. Kendrick, of the Victoria and Albert Museum, though he has 'never seen another tapestry like it', calls it German, and cites a panel at Würzburg that to my eyes does not at all resemble it, and is moreover nearly half a century later in date. As against this my German expert friends, when I had any, unanimously said it was not German. Sir William Hope, I understand, has said that he knows of no English angels habited like these; this is no doubt true enough, but again only negative. On the contrary and positive side comes our Fellow the Rev. E. E. Dorling, who states that 'he has no shadow of doubt that the heraldry and the helm are entirely English in form, character, and feeling; and if they, why not the rest of the design?' If I wanted the best of English opinion on this specific point, I should rely more upon Mr. Dorling than on any other single authority, for he is at once a true artist and an accomplished antiquary, and in matters of style and taste the combination is essential.

Another suggestion has been made, but I hardly like to set it down, after having quoted the opinions of so many persons who have claims to understand medieval works of art. It is nothing less than this—that the tapestry before you is a modern production inspired by Viollet-le-Duc. No one could have a greater admiration for the artistic capacity of this remarkable Frenchman, in spite of the terrible destruction for which he was responsible among the architectural treasures of his own country. But he was above all things an exquisite draughtsman, both of architecture and of the negligible adjuncts to his drawings of buildings. No one can fail to admire the skill shown in the tiny little human figures which serve to give scale to his views—a skill none too common among his fellow architects. The idea of his being the spirit which underlies so quaint and naïve a piece of medievalism as the tapestry now in question appears to me to be but little short of grotesque. Nevertheless, the suggestion had its uses, for it induced our Fellow Mr. Emery Walker to invoke the knowledge and experience of Mr. Dearle, the tapestry expert at Messrs. Morris's, who has actually woven tapestry with his own hands. Mr. Dearle kindly met Mr. Walker at the Burlington Club, and Mr. Walker reports on the interview as follows:

We took it out of the frame and unnailed one corner from the stretcher. We found the under side to be very much the same colour as the right side, showing, as we expected, the piece had never been much exposed to the light, but possibly kept stored away with the vestments of a church. Dearle immediately said that the red was dyed with kermes, the yellow with weld, and the blue with indigo; all three

colours used in medieval dyeing, and two of them still in use by Morris & Co., for dyeing the yarns of their own tapestries. He observed that the colours were not blended with the skill which is observable in the well-known sixteenth-century Brussels pieces, such as those which were made to illustrate the Triumph of Petrarch. I should say the other colours, the brown, &c., were all obtained by a combination of the three colours mentioned. I called Dearle's attention to the fact that the design was reversed; he explained that it would come so unless the tracing upon the warp threads were made in reverse, a process which would be rather difficult before the days of tracing-paper. . . . I forgot to say that Mr. Dearle said that it was woven upon a high warp loom, thus confirming the statement I made that there was no high warp tapestry woven in England from the days of the Mortlake factory until William Morris set up his looms at Merton Abbey, after his experiments at Hammersmith in the early eighties.

This evidence, from a practical man, strikes me as very satisfactory, and goes far to dispose of the theory of the modern origin of the panel. A little examination at close quarters, by any one familiar with the appearance of old tinted fabrics, will do the rest. Fresh as the colour scheme is as a whole, certain parts have undoubtedly faded so much that the detail is gone. A notable example of this is seen in the mouth of the Magdalen. At ordinary range, say six feet or so, the observer hardly perceives that the lips of the figure are carefully outlined, and they themselves are quite colourless, differing in this from all the other figures; clearly the dye used must have been another and much more fugitive tint. What other parts of the colour scheme have changed is not so easy to determine; but I should not hesitate to say that originally the harmonies and contrasts were by no means what we now see.

In dealing with such a subject as this, it might be expected that the inventories of the time would help by inference or induction. But as a matter of fact they are of but little use. The generic name for tapestry, Arras, from the chief place of its manufacture, so often usurped any proper description that inventories so far have not furnished me with any indication in the present instance. That high warp tapestry was in fact made in England in the fourteenth century is unquestionable. As to this the admirable work—so far as it goes—of Mr. W. G. Thomson on *Tapestry Weaving in England* provides ample evidence. When one considers the intimacy of the relations between the great personages in England and the Continent in the fourteenth and fifteenth centuries, this can hardly be doubted. Moreover, Mr. Thomson quotes half a dozen names of Englishmen working at tapestry in Arras or Paris in the fourteenth century, in itself a probable thing and in favour of figured *haute lisse* tapestry being made at the time in this country.

Although the design of the tapestry is well shown in the plate, it is desirable

to append a brief description of it, and to indicate the colours. It represents the Adoration of the Holy Trinity by the Virgin and St. Mary Magdalen, attended by two standing angels. The ground is dark blue, the mound at the bottom being a variegated yellow and green, over which are growing flowers, mostly red and white. The Almighty wears a garment reaching to the feet, with pale brown stripes, and over this a rose-coloured cloak, turned back with yellow and green, the outlines here and elsewhere being of a dark brown. The nimbus is yellow with a brown cross, and the hair and beard grey. Our Lord has a yellow-brown beard and hair, and a similar nimbus, but with rays, the crown of thorns green: the dove is white with red feet. The Virgin wears a close garment with long sleeves, with pale-brown stripes as before, a blue cloak, dark in the lines, light in the mass, lined with rose colour, shaded, the edges being yellow; yellow nimbus jewelled red and blue. The Magdalen has a similar undergarment, but with slate-blue vertical lines, and a pale-yellow cloak shaded with green, and lined with a colour now much faded. Golden-yellow hair much frizzed out, nimbus of concentric circles of rose, blue, yellow, and blue; foot dark brown. The angel holding the cross has a green sleeve, but over all a cloak with red and yellow stripes, having a collar and vairy border of white and pale brown, the wings are yellow reinforced with red: golden-yellow hair and rayed nimbus, diadem surmounted by cross all in red. The cross yellowish white shaded darker, the banner white with pale-brown streaks, the ointment pots rose-coloured, the label white with brown letters, red and blue stops, and green edging. The shield contains most of the above-named colours, the fields being, one and four blue, two and three pale yellowish green. The angel holding the helm wears a yellow robe with green stripes, with wide hanging sleeves lined vair, rose-coloured sleeves of undergarment showing; the wing is yellow with green lines; the helm is pale blue shaded dark, the mantling a faded tint, once perhaps reddish, the torse yellow with green stripes, the column red, and the sponge and spear yellow. All the faces, except that of our Lord, have a delicate pink tint in the cheeks.

POSTSCRIPT.

Since the foregoing was written, I have had a communication from Professor Prior, Slade Professor at Cambridge, who was unable to be present when the paper was read before the Society. As this letter deals with certain specific points raised in the paper, it is not only just but useful to give the substance of Professor Prior's remarks. They are the more valuable as containing the opinion of Dr. James, Provost of King's, also. Both of these authorities agree in finding nothing in the tapestry that to their eyes is *un-English*. As regards

the 'habiting' of the angels, Mr. Prior says, 'the angels on alabasters are habited just as your tapestry shows them. The angels' wings, all separately feathered, Dr. James thinks a decidedly English trick, as on the Norfolk roofs. I would point to the boss carvings at Wells and Worcester,¹ and there are "weeper" angels on alabaster tombs so habited and winged.'

Mr. Prior makes another suggestion that seems to me inherently probable, though the idea had not occurred to me, viz. that the kneeling figure under the banner with the pots of ointment is not the Magdalen, but St. John the Evangelist. The drawing of the figure certainly suggests this, but I must confess that the presence of the banner with the arms of the Magdalen made me uncritical as to the person represented, and I accepted the significance of the shield much as if the name had been written there.

Mr. J. H. Dearle has kindly furnished the following note of his opinion as expressed at the meeting :

The very interesting and exhaustive remarks of Sir Hercules Read have left us absolutely convinced as to the antiquity of the work, and he has dealt so completely with the subject from an artistic point of view that it seems to me to be only necessary to add my own reflections on the technical side.

To my mind the question to be decided is as to whether this little piece of tapestry is very old or very new, i. e. is it archaic in date as well as in character? or is it a modern reproduction of a design in archaic style?

I am inclined to think that it is very old and remarkably well preserved both as to its colour, strength, and the condition of its fibre. The colour is as fresh on the front as it is on the back: an effect rarely found in old tapestries; in addition to this the dark outlines are in a wonderful state of preservation. These being produced in wool dyed with an admixture containing iron, their well-preserved condition is very notable, and might form an argument against the antiquity of the work—not by any means conclusively, however, because careful protection from light and atmospheric action would retard or entirely prevent decay or any such development of these evidences of age: this might easily be accomplished either by accident or intention.

In the character, in the execution of the work, and in the nature of the colouring I think I discern strong evidence of antiquity.

The general style of the design, both as to subject-matter and drawing, belongs to a remote period, and I should not feel inclined to support a contention that this in any way corresponds with a period which may be said to be indicated by the fresh condition of the colour, neither am I inclined to think that it is a modern copy of an older original: if this were so, surely the more famous original would be readily located; further, I am indisposed to think that the design is the result of a modern effort to produce a drawing of Gothic character.

The simplicity of the execution and general style of the weaving show no sign of modern feeling or of the influence that is responsible for the horrors that have come from

¹ *Prior and Gardner, op. cit.*, figs. 599, 600.

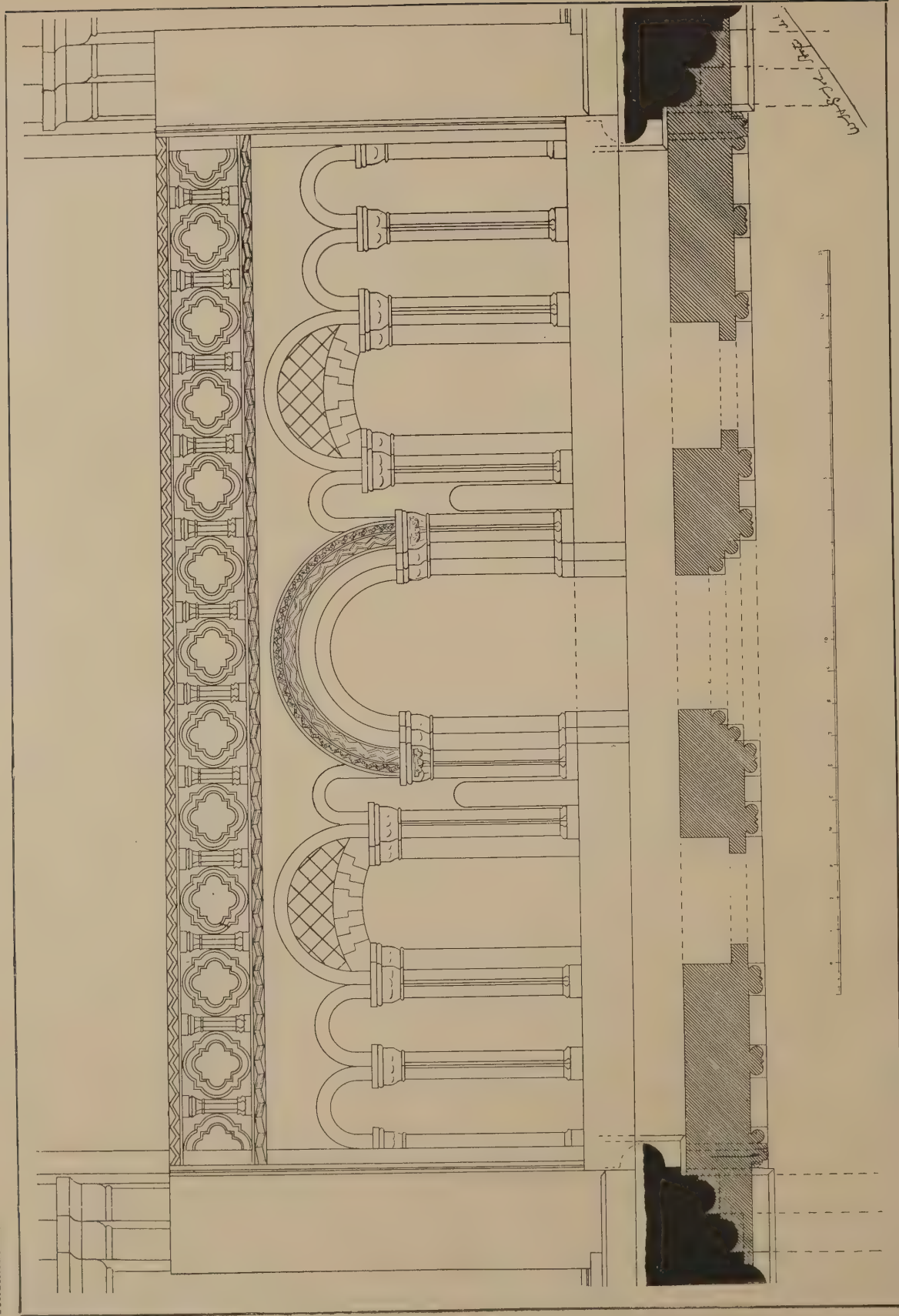
the looms of the Gobelins works ; indeed, the absence of hatching proves that the weaver had not enjoyed the advantage of the fine examples produced by the skilled Flemish weavers of the fifteenth or sixteenth centuries, and there is very little tapestry woven after the fifteenth century that does not show the effect of these examples so far as concerns the technical methods of weaving and general treatment of the designs produced, an influence which was maintained for more than a century. After this the tendency to degeneration was evident, and tapestries became both in design and execution more elaborate and less decorative in character, until in modern times there are few works which can escape censure for viciously inappropriate and inartistic ideals. This little piece of tapestry most certainly does not belong to this later period, or come within this category, and I feel convinced that the simplicity alone of its treatment must relegate it to a period very early in the art of tapestry making.

The question arises, was it made on a high or low warp loom ? My own opinion is that it shows exactly the freedom of style which comes in work executed on a high warp loom, but this does not in any sense mark the period of the work, because it might have been so done either yesterday or fifteen hundred years B.C. I do not attach great importance to the fact that the design has been reversed in transferring to the warp of the loom, neither do I think that any particular decision can be reached by considering the point.

The colour treatment of this tapestry does not reveal to us very much : it is as simple as the design itself, and is therefore good ; the palette is a limited one, there being very little more than red, blue, and yellow : this is in exact accordance with the best traditions of medieval work of this kind. The actual dyes used in the production of these colours correspond with these traditions, and are for blue indigo, for red kermes, and for yellow probably weld, three of the most ancient dyes known, one of which, viz. kermes, a red of singularly beautiful kind, though of no great strength, has fallen out of use practically since the sixteenth century, when it was superseded by cochineal.

These various considerations of technical points in connexion with this tapestry bring me to the conclusion that it is a well-preserved production of perhaps the fifteenth century of a nation which is not to be decided so certainly, but I am confident, after observation of the crudity of the workmanship and the general character of the drawing in the design, that we shall not be wide of the mark if we ascribe it to one of our own countrymen of the early fifteenth century.

It is curious, perhaps, but none the less gratifying to me, that the conclusions I have reached so closely agree with those of Sir Hercules Read, formed after investigations along a much wider and more intricate path.



THE ROODLOFT OR PULPITUM FORMERLY IN THE CATHEDRAL CHURCH OF ELY, AS RESTORED FROM ESSEX'S SKETCHES

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IV.—*Quire Screens in English Churches, with special reference to the Twelfth-Century Quire Screen formerly in the Cathedral Church of Ely.* By Sir WILLIAM ST. JOHN HOPE, *Litt.D., D.C.L.*

Read 1st February 1917.

MANY students of English ecclesiology have long known that, until it was destroyed by the 'ingenious' Mr. James Essex in 1770, there was standing in the cathedral church of Ely the twelfth-century stone screen that anciently formed the western boundary of the monks' quire.

None of the histories of Ely unhappily gives any picture of the screen, and until quite lately nothing was known of it beyond the plan shown by Browne Willis¹ and the notes published by Bentham.² These last are reprinted in the Rev. D. J. Stewart's monograph on the cathedral church,³ with a reference to 'a rude sketch still existing in the British Museum'. But Mr. Stewart gives no authority for this, and the sketch has been as elusive as the lost screen.

For some time past Mr. Aymer Vallance has been patiently collecting materials for a proper history of English screens and screenwork, and while looking through some volumes of drawings in the British Museum he fortunately lighted upon the sketches of the Ely screen, made by Essex himself before it was taken down and broken up (pl. X). These sketches can be identified by the title 'the old Roodloft at Ely', and consist of three pages of pen-and-ink drawings of details of the screen, happily with their dimensions.⁴ These were not enough to enable any proper drawing of the screen to be reconstructed, but Mr. Vallance has found in another volume⁵ an unnamed pencil-sketch of part of the elevation which fortunately supplies the missing data. Mr. Vallance has further most kindly entrusted to me photographs of all four sketches, and from these I have ventured to reconstruct the diagram reproduced on plate IX.

This recovery of the plan, design, and arrangement of the Ely screen forms

¹ *A Survey of the Cathedrals of Lincoln, Ely, Oxford, and Peterborough* (London, 1730).

² James Bentham, *The History and Antiquities of the Conventual and Cathedral Church of Ely*, 2nd edition (Norwich, 1812), Addenda, 3.

³ D. J. Stewart, *On the Architectural History of Ely Cathedral* (London, 1868), 43.

⁴ Add. MS. 6768, pp. 122-4.

⁵ Add. MS. 6772, p. 196.

an important chapter in the history of quire screens. It will therefore be more convenient to discuss the subject at large, and to describe the Ely example in its proper place.

Solid screens bounding the quire westwards were not the rule, and so need not be looked for in parish churches, but are peculiar to the churches of monastic or collegiate foundations, or to those served by regular or secular canons.

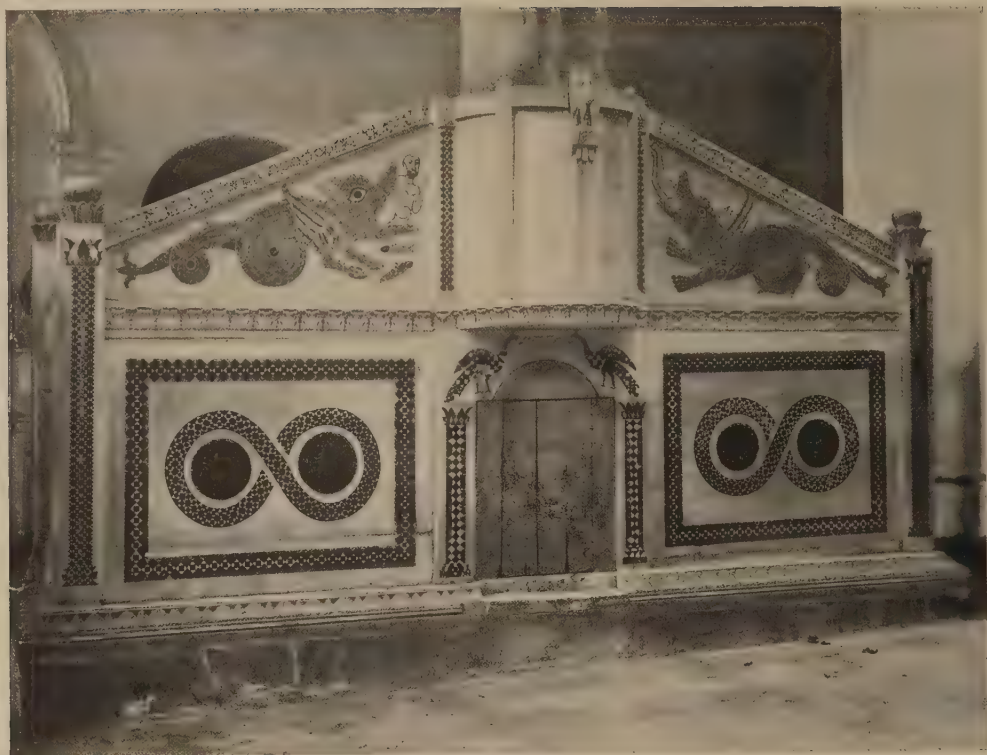
It is also necessary to observe that no proper appreciation of the subject can be had without a full understanding of the use to which churches were put, and therefore of the reasons why such screens were set up.

This question of use leads to a distinction that must be drawn between churches of monks and regular canons on the one hand, and those of a college or secular canons on the other hand. Their services were of course not unlike, but owing to the difference in manner of living, the churches of the secular chapters were not used in quite the same way as those of men and women who observed a different time-table, and followed a stricter rule than a set of statutes. Both seculars and regulars regarded the quire and presbytery as their private chapel, but whereas the seculars admitted lay folk to their services, the monastic orders discouraged this, and the Cluniacs, Cistercians, Carthusians, and White Canons, as well as the orders of nuns, did not admit strangers even into their churches, except as a special favour.

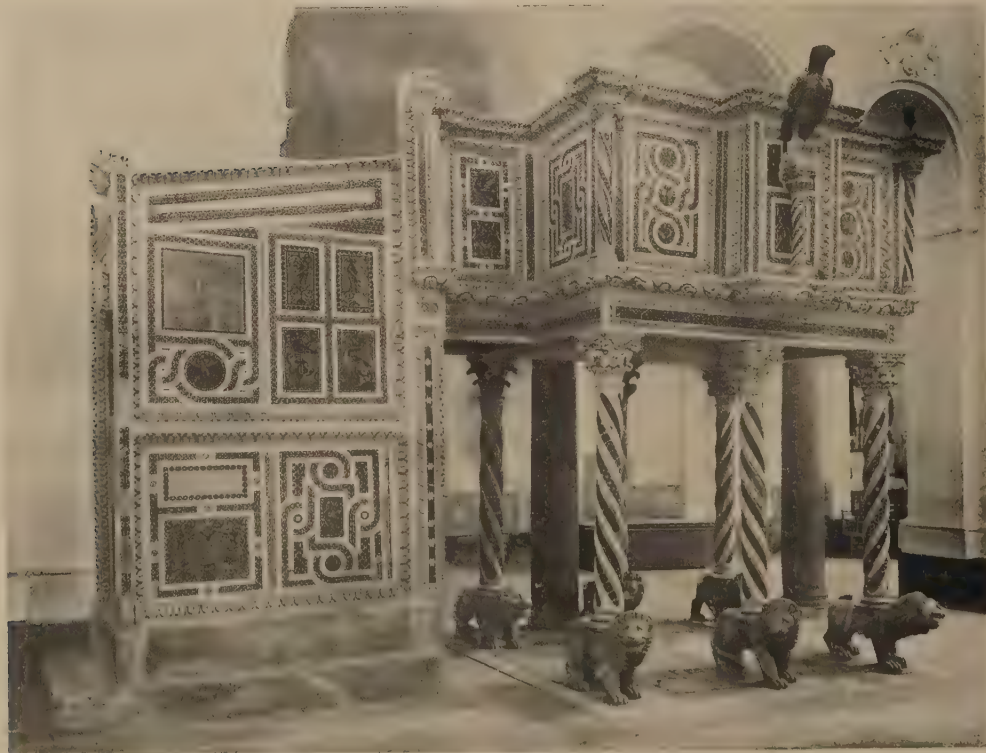
A partial admission of lay folk by the Benedictines and the Black Canons was probably due to the fact that in a large number of cases the foundations of these orders were established in existing parish churches, which they shared with the parishioners. In later times, too, the attraction of the shrine of a popular saint brought crowds of pilgrims day by day. Even the exclusive Cistercian could not restrain visitors to the Holy Blood of Hayles; while the shrines of St. Hugh, St. Richard, St. David, St. Osmund, St. Chad, St. John of Beverley, St. Wilfrid of Ripon, St. Thomas Cantelupe and St. Ethelbert of Hereford, and St. Erkenwald in 'Powles', were as popular in churches of secular foundations as those of St. Thomas, St. Cuthbert, St. Etheldreda, and a score of others in monastic churches.

This liberty of access by lay folk mattered little in a secular church, and accordingly the arrangement of the screens is simple, being confined practically to the enclosure of the quire and presbytery, and the protection of any standing shrine behind the high altar.

But in a monastic house the privacy of the monks, nuns, canons, or friars, who lived in the adjoining cloister, and their freedom of access to the church for the night offices and other services, demanded that their quires should be more closely screened from visitors and yet be accessible at all times without hindrance.



THE EPISTLE AMBON AT RAVELLO, ITALY



THE GOSPEL AMBON AT RAVELLO, ITALY

The way in which this was sometimes done when there were shrines to be visited, as at Christchurch Canterbury, and at Rochester, called for the exercise of considerable ingenuity, but before continuing the subject some retrospect is necessary in order to introduce other factors.

There can be little doubt that the origin of the solid screens at the western boundary of our quires is to be found in the early practice of the Christian Church of the ceremonial reading of the Epistle and the Gospel from special lecterns or ambons. There does not seem to be any evidence for this practice in England, but it need not therefore be assumed that it was not done at all. In any wise it is necessary to look into the question in general.

So few churches in France and even in Italy have retained unaltered¹ their old arrangements that it is difficult to quote concrete examples. A very early ambon of the sixth or seventh century is preserved, though not in place, in the church of Sant' Apollinare Nuovo at Ravenna, in the form of a marble pulpit standing on pillars. At San Clemente in Rome the present quire fittings are those of the under-church brought up and somewhat carelessly rearranged. They include a gospel ambon on the south and an epistle ambon on the north, which are figured in Parker's *Glossary of Architecture*.² In the duomo at Ravello, though the quire itself has gone, both ambons remain apparently in their places in the nave, below the quire platform: the twelfth-century epistle desk on the north side, with its quaint mosaics of the story of Jonah; the splendid but later gospel desk on the south, with its stately ascent, and six supporting pillars resting upon lions (pl. XI). Another fine gospel ambon of the same type stands in another church at Ravello, that of San Giovanni del Toro, and there is yet a third at Scala hard by. A fourth, also of the twelfth century, with its front pillars resting upon lions, and a fine contemporary paschal candlestick placed beside it, exists in the Benedictine abbey church of la Trinità della Cava in the same district.³ All the examples just cited, including the epistle ambon at Ravello, have a marble eagle to carry the desk for the book, and in the gospel ambons the eagle of course faces north.

The next step in the evolution of the screen may be seen in the cathedral church of Salerno, where the quire and its enclosure are fortunately intact. The quire is here shut in westwards by two high walls of twelfth-century work, decorated with marble and mosaic, and connected by a metal screen with gates that give access to the quire. Both walls are thick enough to contain stairs within,

¹ I must plead entire ignorance of the churches of Germany.

² Fifth edition (1850), i, 23.

³ Another fine gospel ambon and paschal candlestick, both of the twelfth century and covered with mosaic, stand in the beautiful chapel of the Palazzo Reale at Palermo. The ambon is on the south of the quire with an eagle desk facing north.

ascending to the contemporary epistle and gospel ambons that stand just outside to the west. These ambons, like the staircases, are splendid structures of marble and mosaic. The epistle ambon on the north is carried upon four pillars and has a projecting semicircular front facing south. The larger and loftier gospel ambon opposite stands on six pillars like the Ravello examples, and beside it is a tall paschal candlestick (pl. XII). It will be useful to bear in mind that both the Ravello gospel ambons, that at la Trinità della Cava and this at Salerno, have provision for an altar beneath.

I do not myself know of any early instance abroad where the next step is exemplified, of combining the two ambons into one loft, from which the Epistle and Gospel continued to be read. It will be convenient, therefore, to turn to this country, and see what connexion can be established between the Italian ambons and the English solid quire screens.

In the customals and statutes of English churches the Latin name for the solid screen bounding the quire westward is *pulpitum*. At Exeter the accounts for its reconstruction from 1317 onwards call it 'la pulpytte', and at Ripon Minster as early as 1354-5 it is called 'la purpitle'. In the fifteenth century the screen and loft in the old chapel of St. Edward and St. George in Windsor Castle were likewise called 'la pulpete'. Its use is definitely fixed in the secular churches, as well as in those of collegiate rank, as the place, loft, or gallery, from which at stated times the Epistle and Gospel were read; it was also used for minor purposes.

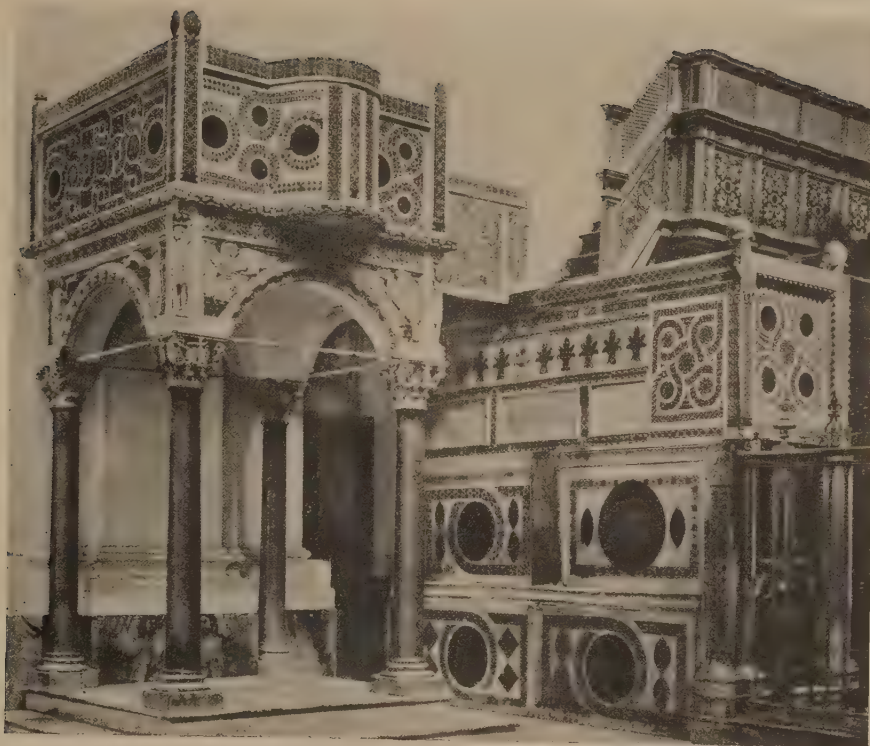
Inasmuch as the monastic orders do not seem to have used the *pulpitum* in quite the same way, it will be desirable to deal first with those in the churches of secular canons.

The important document known as the Consuetudinary of Sarum, though embodying much older rules, is considered by the best and latest authorities to be not earlier than 1173 nor later than 1220, or about 1210. It must, therefore, have been used in the cathedral church of Old Sarum, but it was ready to hand for the regulation of the services, etc., on the building of the new and present church of Salisbury in the plain below. Moreover, since it is the oldest and most famous of such rules that has come down to us, it has served as the basis of the customs observed in almost every other church of secular canons in this country.

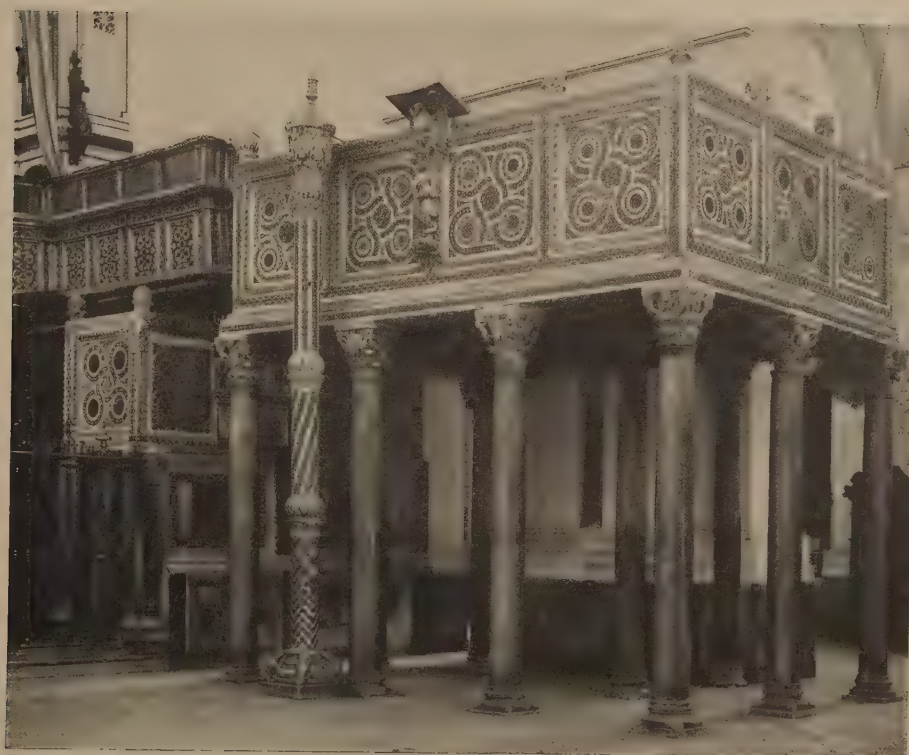
Many of the rules laid down in the Consuetudinary are set out at greater length in the Salisbury document known as the Customary, which seems to have been compiled and elaborated from the older forms during the first half of the fourteenth century; it has been supposed for the information of churches in the diocese, but this is somewhat doubtful.

From these two sources it can be shown that the *pulpitum* was used

- (i) for the singing of the lessons at mattins,



THE QUIRE SCREEN AND EPISTLE AMBON AT SALERNO, ITALY



THE GOSPEL AMBON AND PASCHAL CANDLESTICK AT SALERNO, ITALY

(ii) for the reading of the Epistle, the singing of the gradual and the alleluya, and the reading of the Gospel from an eagle desk, on Sundays and all great days; also

(iii) for the lesson at mass.

It was likewise used

(iv) for certain functions, when a station was made before the cross or rood that stood above it, as in the Sunday and other processions, and for the singing of the genealogy at mattins on Christmas Day.

The great importance attaching to the ceremonial reading of the Epistle and Gospel is fully illustrated by both documents cited, as well as by the rubrics for Advent Sunday in the Sarum mass-book.

After the last collect in the mass had been begun, the subdeacon went from the altar through the middle of the quire to read the Epistle in the *pulpitum*. And it was to be so read every Sunday and whenever the quire was ruled through the whole year; also on Maundy Thursday, the vigils of Easter and Pentecost, and on All Souls' Day. At other times the Epistle was read at the quire step (*ad gradum chori*) from a desk or lectern. On the days when the Epistle was read from the *pulpitum*, which was done facing eastwards towards the quire, the gradual was also sung in the *pulpitum* by two boys in surplices, and not, as was usually the case and as its name implies, at the quire step. The alleluya which followed was likewise sung from the *pulpitum* by two clerks of the upper rank in silk copes. The Consuetudinary further directs that after the Epistle has been read, one of the taperers with a boy from the quire shall prepare to adorn the eagle (*aquilam*) in the *pulpitum* for the reading of the Gospel, probably by hanging over it a silken cloth or 'towel'. At the end of the alleluya, sequence, or tract, the deacon went through the middle of the quire to the *pulpitum* carrying the text or gospel book in his left hand, and preceded by the tribuler and taperers and sometimes by the cross. When he arrived at the place of reading the subdeacon took the text and held it on the left side of the deacon while he read the Gospel from another book on the eagle facing to the north.

These directions are quite sufficient to show a continuity of use in the manner of reading the Epistle and Gospel from the ambons of earlier date.

Another use of the *pulpitum* is that to which it was put at Salisbury and elsewhere on Christmas Day. After the third nocturn of mattins the deacon and subdeacon, with tribuler, taperers, and the collet bearing the cross, went through the middle of the quire to the *pulpitum* to sing the genealogy, or first sixteen verses of St. Matthew's Gospel. The *pulpitum* was also used during the procession before high mass on Candlemas Day, Easter Day, and Rogation Sunday for the singing of the verse by three clerks of the upper rank 'turned to the people', that is,

westwards towards the nave, whereas everything else was sung eastwards towards the quire. The procession meanwhile made a station in the nave before the great rood that stood above the *pulpitum*, as it did every Sunday.

When the Gospel was not read from the eagle in the *pulpitum* it was read in the presbytery at the lower step of the altar from a desk prepared for it, turned towards the north.¹

It only remains to add that, as the customals and the rubrics in the service books show, this use of the *pulpitum* at Salisbury was followed in almost exactly the same way at Lincoln, York, Exeter, Hereford, and Lichfield, and it is to be presumed in every other cathedral and collegiate church of secular canons in this country.

The reading of the Gospel from a desk surmounted by an eagle, as was the rule at Old Sarum and Salisbury, has its origin in the eagle desks that are so conspicuous on the ambons, and no doubt every church that could afford it had such a one upon the *pulpitum*. As this was a permanent feature it is not generally found in inventories, through not being one of the ornaments passed on from sacrist to sacrist. But the inventory of the contents of the treasury at Old Sarum in 1214, removed to Salisbury in 1222, mentions the *lectricum aquile* and the towel or cloth (*tuella*) for it; also a linen cloth worked with silk *ad pulpitum* on feasts of nine lessons, and a linen cloth *ad lectricum* (presumably that in the presbytery) on ferial days.² In the Exeter fabric roll for 1330-1 is a charge for ironwork *circa aquilam in le Polpit*.

The material of these eagles is uncertain. At first they may have been of wood, like the fourteenth-century example bearing the arms of bishop John Graunson at Ottery St. Mary. Later on, when metal desks became more common, the eagle would be of latten or brass on a moulded shaft of the same material, like so many existing examples used now to read the lessons from. The account of the precentor of the college of Windsor for 1400-1 contains a payment to a carpenter *pro lectrino in pulpito* for the old chapel of St. Edward and St. George, and among the things made of iron in a Windsor Castle account for 1355-6 is *j lettron pro capella*.

At a visitation of York Minster in 1519 it was noted among other things:

Item if the lettron in the chapitor were skowred & set in myddys of the hie where, and the roste yerne in the same where set in y^e chapitour, we thynke shulde do well . . .

¹ At Hereford for ordinary days the mass-book has this direction: 'Deinde legatur Epistola super lectrinum a Subdiacono ad gradum Chori, et Evangelium a Diacono super superiorem gradum converso ad partem Borealem; et Gradale et Alleluya cum suis Versibus super lectrinum in medio Chori.'

² C. Wordsworth, *Salisbury Ceremonies and Processions*, 173.

Item the lettron wherupon the gospell is red is moisterd away & faullyn downe, whiche specially wold be amendid by cause it is in opyn sighte.¹

This gospel desk seems to have been an iron one at the high altar for ordinary use, which had rusted away like the chanters' desk lower down in the quire.

A charge of 5s. in the accounts of the warden of the fabric for 1543-4 'for scowring of the letteron fyve tymes'² must refer to a new desk, or perhaps to one in the *pulpitum* of which there is no other record.

Another of the 'ornaments of the church' that in many cases stood in the *pulpitum* was a pair of organs, though for this again the evidence is often but negative. At Exeter a charge *circa Organa claudenda* occurs in the fabric roll for 1286, but the organs are not mentioned again until 1460, and for small repairs in 1479-80. In 1513-14 the large sum of £165 15s. 7½d. was spent *pro Novis Organis in pulpito*,³ so that not only the new instrument, but probably the older one that it replaced was set up therein. Various entries in the accounts prove that as early as 1408-9 the organs in Ripon Minster stood 'in le purpytyl';⁴ and in 1482 dean Thomas Heywood gave to the cathedral church of Lichfield⁵ the *magna organa in pulpito* which cost £26 3s. 4d.

In the fabric rolls of York Minster are many entries relating to the organs, but the only clue to their position occurs in the account of a visitation of the church in 1375:

Vicarii in diebus solempnibus nolunt organum cantare in pulpito nisi canonici dictae Ecclesiae eis conferant vinum, quod vendicant ex consuetudine.⁶

¹ *York Fabric Rolls* (Surtees Soc. 35), 267, 268.

² *Ibid.* III.

³ Computus predicti domini Johannis Maior Clerici Operis hoc anno pro diversis Rebus emptis et expensis factis, ut patet per unum quaternum Inde factum et super hunc Computum ostensum pro Novis Organis in pulpito.

In Expensis [as per lost schedule] xlii. li. iiij. s. vj. d. ob. qa.; Empcio Stagni, xxxiv. li. x. s. v. d.; Ferramenta, iiij. li. vij. d. ob.; Liberacio denariorum (to Laurence Playssher) lxxj. li. Summa, clj. li. xv. s. vij. d. q^a.

[Added:] M^d de x li. datis Lawrencio Playssher per decretum Capituli ex Rewardo
citra hunc computum summa x. li.
M^d de l plankis emptis de Johanne Grynewaye et Resolut. Domine de
Devonshere iiij. li.
Expense Organorum cum Regardo clxiiij. li. xv. s. vij. d. q^a. [sic]

⁴ Fabric Roll 1408-9:

Item et in porcione meremii emp. de Will. Wryth pro j fundo in le purpytyl et pro hostio ibidem ad magnas organas, 18 d.

Fabric Roll 1453-5:

Et de 20 s. solutis Will. Organmaker pro emendacione de organicis cum les belousse earundem.

Et de 4 s. 3 d. solutis Rob. Wright operanti le Purpetill dict. organicarum.

Memorials of Ripon (Surtees Soc. 81), iii, 137, 161, 162.

⁵ *Archaeologia*, lii, 638.

⁶ *York Fabric Rolls*, 243.

At Southwell the only documentary evidence of the organs is a complaint in 1519 that Dan George Vincent, one of the vicars choral, is very often absent from quire,

qua de causa organa secundum suum officium non pulsantur tempore divinorum.¹

This traditional place for the organs explains the presence upon the loft of the vast music machines still in being at York, Lincoln, Exeter, and divers other minsters and collegiate churches and chapels.²

In a few rare cases, where floor space was limited or otherwise occupied, the *pulpitum* seems to have held an altar. This was certainly so in the old chapel of St. Edward and St. George in Windsor Castle, since materials for, apparently, a wooden altar *in pulpito* are accounted for in 1382-3.³

The old chapel of King's College at Cambridge⁴ also had an altar in the *pulpitum*, as appears from a charge in the accounts for 1503-4 'pro cirpis pro capella in the Rodeloft'; and the two nave altars mentioned in 1476-7 probably stood against the *pulpitum*, like two similar altars at Windsor.

In York Minster there was a chantry altar 'in solario coram ymagine Sancti Salvatoris ex parte australi Ecclesie' which is described in an inventory of 1543⁵ as 'altare nominis Ihesu in the rudde loft'. Hence it has been assumed to have stood in the *pulpitum*; but the chantry certificate of 1546 calls it 'th'aulter of Saynte Savyoure in the loft of the south syde of the said church', and the certificate of 1548 'The alter of Saynt Savyor in the Litell Roode Lofte',⁶ which was certainly not that at the west end of the quire.

It is hardly necessary to say that the *pulpitum* was in every case surmounted,

¹ Leach, *Visitations*, etc., 87.

² The collegiate church of Fotheringhay in 1548 had two pair of organs, but where they stood is uncertain. The description of them is, however, worth quoting on account of its unusual fullness:

Item ij faire pair of organs thone of iiij stops very good & lyg [*sic*] thother of iiij stops lesser & wors w^t ij deskes & chairs for y^e players at y^e same. Item ij pratie deskes or lectornes of framed tymber. Item ij organ cases. (P. R. O. Aug. Off. Misc. Bk. 145, f. 96.) The same church had also an eagle desk, variously described as a 'lattern lectorne w^t the Egle', or 'w^t an egle of laton in the topp'.

³ 1382-3 'In iij tabulis emptis pro altari in pulpito x. di. s. In ij bendes ferreis pro dicto altari vj d.' (Precentor's Acct. xv, 56. 6).

In the precentor's account for 1400-1 (xv, 56. 16) is a payment to a carpenter 'pro lectrino in pulpito', and mending the stalls. Hope, *Windsor Castle: an Architectural History* (London, 1913), part ii, 396, nn. 23, 21.

⁴ Willis and Clark, *The Architectural History of the University of Cambridge and of the Colleges of Cambridge and Eton* (Cambridge, 1886), i, 535, note 2.

⁵ *Yorkshire Chantry Surveys* (Surtees Soc. 91, 92), i, 10 and ii, 431. See also *York Fabric Rolls*, 300, 301.

⁶ *Inventories of Church Goods for the Counties of York, Durham, and Northumberland* (Surtees Soc. 97), 115.

usually upon a beam that crossed the church above it, by the great rood with its attendant images of our Lady and St. John, and sometimes other figures. Every English example was unhappily destroyed in the sixteenth century, but references to the making, painting, or mending of them are to be met with in accounts, and other notices of them will occur presently.¹

How far back it is possible to prove the existence of a *pulpitum* in an English church is an interesting question.

The earliest example so far for which I have documentary evidence was set up in Beverley Minster by Ealdred archbishop of York between the years 1060 and 1069.

There was already a church then at Beverley, to which Ealdred added a new presbytery, a fact duly recorded in an early twelfth-century MS. in the Bodleian Library. The archbishop is likewise credited with another work, that

Above the quire door he also caused to be made a *pulpitum* (or loft) of incomparable work of bronze and gold and silver, and on either side of the loft he set up arches, and in the middle above the loft a higher arch carrying on its top a cross, likewise of bronze and gold and silver, skilfully fashioned of Teutonic work.²

This metal screen at Beverley is not described because a *pulpitum* there was a new thing, but on account of its exceptional character; and it may be assumed that Ealdred's own minster at York also had a *pulpitum* befitting its higher dignity.

Apparently there is no documentary reference to the quire screen of any other secular church rebuilt or founded in the eleventh century. A consideration of their ground plans, on the other hand, reveals several important facts. At Osmund's church at Old Sarum and Remy's minster at Lincoln, both hallowed in 1092; at Chichester, finished about 1120, and at Lichfield, Southwell, Hereford, and the hospital of St. Cross near Winchester, there was in each church a short presbytery with the quire extending westwards under the crossing formed by the middle tower to a *pulpitum* under its western arch, or in the first bay of the nave.

¹ A mid-thirteenth century list of the relics belonging to York Minster shows that the great rood there was itself a huge reliquary:

'Scilicet in magna cruce, quae stat ultra pulpitum in introitu chori, quam Rogerus Archiepiscopus fecit parari et postmodum dedicavit, continentur in corpore imaginis crucifixi reliquiae sanctorum Apostolorum Petri et Pauli et Mathei et sanctorum martirum Mauricij sociorumque eius, Sebastiani, et Calixti papae, Cipriani episcopi, Justinae matris Felicis Treverensis episcopi, sancti Rustici Treverensis episcopi et Sanctae Fellicitatis.' *York Fabric Rolls*, 150.

² 'Supra ostium chori pulpitum opere incomparabili, aere, auro, argentoque fabricari fecit, et ex utraque parte pulpiti arcus, et in medio supra pulpitum arcum eminentiorem crucem in summitate gestantem, similiter ex aere, auro, et argento, opere Theutonico fabrefactos erexit.' *Chronica pontificum Ecclesiae Eboracensis*, Digby MS. 140. Printed in *Historians of the Church of York*, ed. Raine (R.S. 71), ii, 354.

QUIRE SCREENS IN ENGLISH CHURCHES

At Wells, in the new church begun and planned by bishop Rainald (1174-91), the quire extended under the tower and into the first bay of the nave, where the stalls abutted against a *pulpitum* between the first pair of piers, with flanking screens in line across the aisles. Against or under the *pulpitum* were two altars, one on either side the quire door, and another pair, right and left, against the

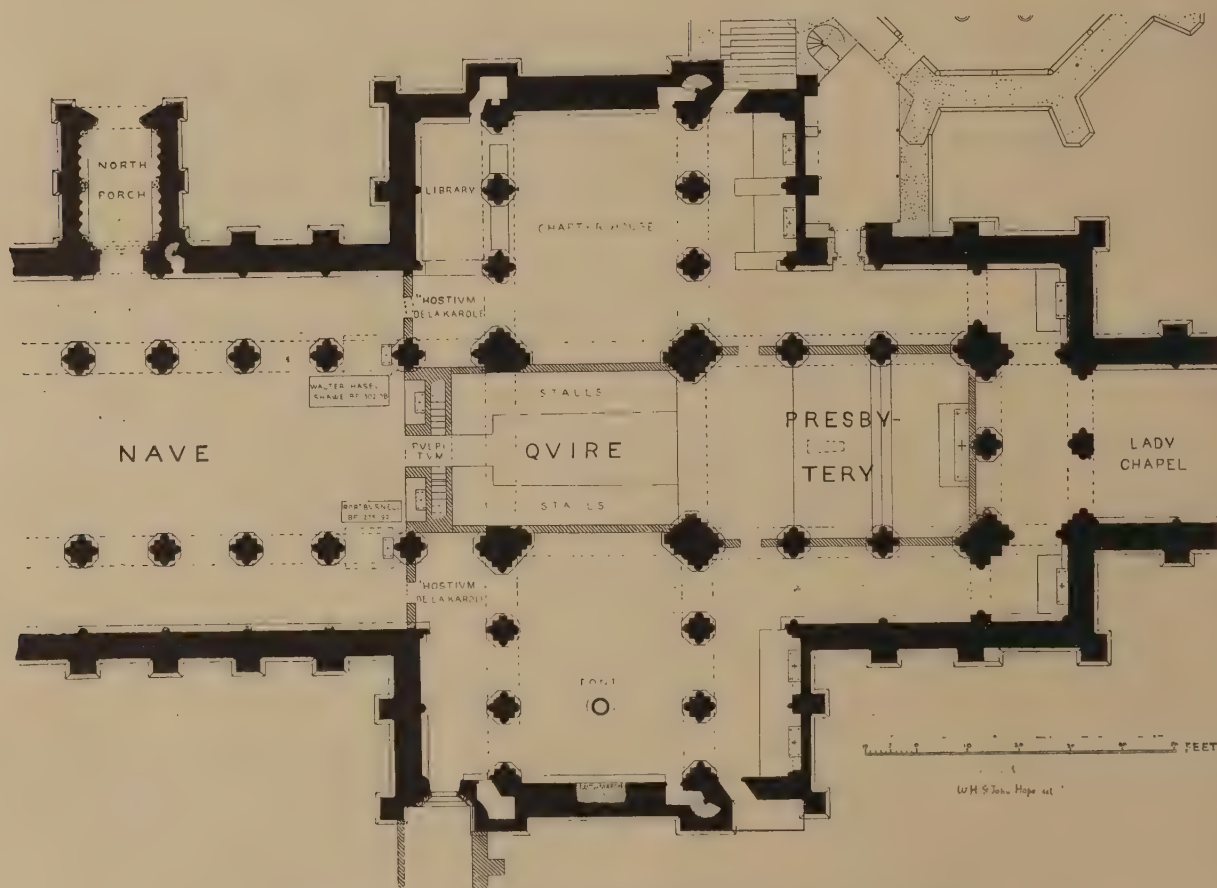


Fig. 1. Wells Cathedral Church : original arrangement of the quire screens.

piers. In the side screens were doorways, referred to in a Statute of 1297 as the *hostia de la Karole*, that is, of the enclosure. All parts of the church eastwards of the bishop's entrance from the cloister in the south transept were thus completely shut off from the rest of the nave (fig. 1).

This line of screens at Wells has given way to other and later arrangements due to the enlargement of the building eastwards, but it apparently represented

the original scheme, and the documentary and architectural evidence for its existence is happily quite clear.¹

The Wells example is important, because it is probable that a similar arrangement had been adopted in the earlier cases cited, as it almost certainly

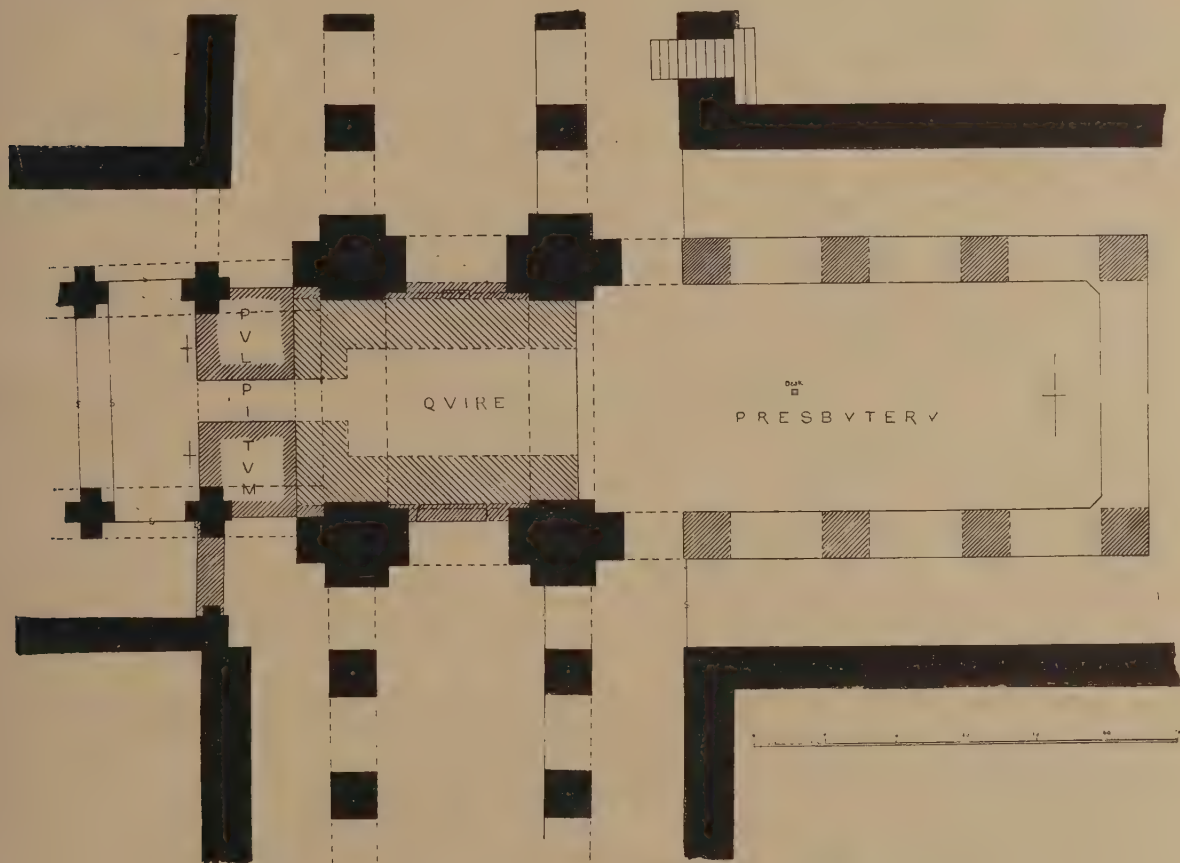


Fig. 2. Old Sarum Cathedral Church : plan of the quire and presbytery.

was at St. Cross.² The placing of altars against the west face of the *pulpitum* may also be looked upon as a normal feature : the reason being that, despite the admittance of lay folk into the presbytery, the services there were those of a quire and not a parish church. Many, too, of these minsters and cathedral

¹ C. M. Church, *Chapters in the Early History of the Church of Wells* (London, 1894), 322-8.

² 'The quire abutted against a screen (now gone) under the west arch of the crossing, and was flanked by an altar on each side against the respond of each arcade. Above the site of the screen are the ends of the rood-beam in the wall about 40 ft. up.' Note made on the spot in 1892 by W. H. St. J. H.

churches, including certainly Old Sarum, Lincoln, Chichester, Southwell, Beverley, and Ripon, contained altars for the use of parishioners who had an earlier or prescriptive right therein. Now the obvious place for a parish altar was outside the presbytery, and against such a dignified backing as the *pulpitum* that blocked the eastern end of the nave. The fact, too, that this had the quire doorway in the middle allowed a second altar to be added when necessary, or perhaps merely to balance the other.

Attention has already been drawn to the altars beneath the gospel ambons in Italy, and it is quite possible that Ealdred's metal screen at Beverley had altars under its loft.

At Old Sarum there is architectural evidence which bridges the interval between the Beverley screen and the known arrangement at Wells.

The first church, that hallowed in 1092, was enlarged and extended by bishop Roger between 1103 and 1139. In this enlarged building, as our recent excavations have shown, the quire extended, as before, under the new tower westwards to a solid stone *pulpitum* 14 ft. deep, filling the first bay of the nave. In its thickness were stairs to the loft above, and flanking the quire door, on a platform one step below the quire but two steps above the nave, were two altars, probably of the Holy Cross and St. Mary Magdalene.¹ As at Wells there were screens in line with the *pulpitum* across the aisles to complete the barrier between the two halves of the church. That to the south was a later blocking, with an altar against it; but the other (which had been demolished), if it also had an altar, must likewise have had a doorway through it for the Sunday and other processions (fig. 2).

The next change was the removal of the *pulpitum* from the western side to the eastern arch of the tower, on account of the enlarged quire and presbytery obtained by the extensive rebuilding of the eastern limb.² As regards secular churches this was begun at York by archbishop Roger between 1154

¹ As the screen had been destroyed down to the floor-level it was impossible to make out its internal arrangements, but since there is ample space for stairs to the loft, it is quite likely that the west front contained recesses for the altars that flanked the quire entry.

² Hereford is the only cathedral church in which the *pulpitum* had retained, until modern times, its original position under the western arch of the crossing: (i) on account of the extreme shortness of the presbytery, and (ii) because the later extensions were all east of the presbytery itself, which was left unaltered. The *pulpitum* and quire stalls were, however, taken down about 1840, on account of the dangerous condition of the tower above them. When the church was eventually refurnished in 1863 by Sir Gilbert Scott, the *pulpitum* was replaced by an open screen of metal-work under the eastern arch of the crossing and the stalls jammed into the old presbytery. Scott's own comment on this proceeding is that he was carried away by the theory then current of 'fitting the arrangements of our cathedrals to modern necessities, and at the same time to true church arrangement, making their choirs purely ecclesiastical, and opening out their naves to the uses of the congregation'. But he has the grace to conclude: 'I am not sure that I should do so were my time to come over again, but I do believe that the uses of the cathedral have gained by it.' *The Archaeological Journal*, xxxiv, 348.



Photo. Mr. Aymer Vallance, F.A.S.

SALISBURY CATHEDRAL CHURCH: DETAIL OF REMAINS OF THE *PULPITUM*,
NOW IN THE NORTH-EAST TRANSEPT



SALISBURY CATHEDRAL CHURCH: THE QUIRE SCREEN AND ORGAN LOFT IN 1754

and 1181, and followed in his new work at Ripon. St. Hugh did much to enlarge his minster at Lincoln between 1192 and his death in 1200.

At Lichfield, Beverley, and Southwell, the extensions all belong to the early part of the thirteenth century, while at Salisbury the new church begun in 1220 provided in its laying out ample room for presbytery and quire east of the crossing. At St. Paul's in London the eastern limb was twice enlarged in the thirteenth century. The new work at Exeter dates from about 1270, and that at Wells from the middle part of the fourteenth century.

The screen at Lincoln was superseded in the fourteenth century by the beautiful stone *pulpitum* still to be seen there, but a description of the earlier one has been preserved in the *Metrical Life of St. Hugh* in these terms:

Concerning the Rood and golden table at the entry of the quire.
A golden majesty adorns the entry of the quire
And the Rood with its proper image of Christ is suitably represented;
The progress too of his life is perfectly introduced there.
Not only the cross or image, but the broad surface of the six pillars
And of the two wooden beams glitters with refined gold.¹

The late Precentor Venables interpreted this to mean that the screen had six pillars and that two wooden ones upheld the rood. But Mr. Vallance tells me that he supposes the two beams to have formed the lower and upper transverse members of the loft, with the golden rood above. In that case the scenes from our Lord's life would fitly have decorated the front of the loft itself. The six supporting pillars were apparently of stone, and it is not unlikely that under the loft were two altars flanking the quire door. One of these would then be the altar of the Holy Cross, which seems to have stood against the *pulpitum* of bishop Remy's church, and the other was perhaps the altar of the parishioners of St. Mary Magdalene, who had parochial rights in the minster until late in the thirteenth century, when bishop Oliver Sutton built them a church outside.

On the completion of the quire and presbytery at Salisbury about 1260 there was set up under the eastern arch of the tower a beautiful *pulpitum* of Purbeck marble. It was about 12½ ft. deep, according to the old plan published by Richard Gough, with two stairs in its thickness, and towards the nave were seven niches on either side the quire door, which was a lofty double one with

¹ De crucifixo et tabula aurea in introitu chori.
Introitumque chori maiestas aurea pingit
Et proprie propria crucifixus imagine Christi
Exprimitur viteque suae progressus ad unguem
Insinuatur ibi. Nec solum crux vel imago,
Immo columnarum sex lignorumque duorum
Ampla superficies, obrizo fulgurat auro.

Metrical Life of St. Hugh bishop of Lincoln, edited by Rev. J. F. Dimock (Lincoln 1860), ll. 950-5.

a horizontal lintel. Above the niches was a parapet to the loft panelled in twelve divisions.¹ A view published in 1754² shows the screen entire with some later panelling above and a fine organ (pl. XIII). This was all swept away by Wyatt in 1789 and replaced by a creation of his own,³ but the wall of niches was preserved and set up in the north-east transept, where it may still be seen (pl. XIII). The niches were originally filled with imagery, but that did not hinder the setting up below them of a pair of altars, of St. Denys to the north and of St. Andrew to the south of the doorway. During the building of the buttressing arches under the tower early in the fifteenth century these altars were taken down and set up on each side of the nave against the tower piers, where they remained. There is some evidence of a third altar, of the Holy Cross, in the rood-loft itself.

The *pulpitum* in old St. Paul's seems to have been a late thirteenth-century work, and of three equal divisions: a broad vaulted porch-like entry in the middle, with two ranges each of four canopied images on either side. Owing to the existence of a crypt eastwards, it stood under the eastern arch of the crossing upon a platform twelve steps high, which also extended right and left in front of the richly decorated doorways, apparently of later date than the *pulpitum*, that opened into the quire aisles and completed the western barrier.

The new presbytery and quire at Exeter were in building from about 1270 to 1308, and sufficiently completed in 1309-10 for the thirteenth-century stalls of the older quire to be set up in the new one. The existing *pulpitum* of stone (pl. XIV) against which the stalls abut was begun in 1317, when four marble columns were bought 'pro la pulpytte'. In 1318-19 the pillars were paid for, more marble was bought, and two altars with marble fronts made. In 1319-20 various iron bars were bought 'pro le pulpytte', and in 1323-4 ironwork for its doors and carved heads for the stone vault (*pro voutura clausure*). In 1324-5, 2,000 tiles were bought for the floors; twelve images for the two end panels, ten little

¹ From a stray note, written between 1397 and 1399, now in a manuscript at Emmanuel College, Cambridge [I. 2. 6. fly-leaf], it is evident that the fourteen principal niches of the *pulpitum* were filled with images of kings of England. The note is headed: 'Nomina Regum in ecclesia Sarisburiensi', and contains a list of seven kings 'In dextra parte introitus chori Sar.', from Edgar to William Rufus, and of seven other kings 'In sinistra parte introitus chori Sar.', from Henry I to Henry III, in whose reign the screen was set up. Also a further list of images 'In australi parte chori Sar.' of the three Edwards and of Richard II and his two queens. Possibly these six were over or about a doorway in the enterclose at the west end of the south aisle of the quire, in line with the *pulpitum*. The list quoted has twice been printed (see *The Wiltshire Magazine*, xxxviii, 567), but the important word *introitus* has been misread as *interioris*.

² Drawn by James Biddlecombe and engraved by J. S. Muller.

³ Owing to the more recent growth of the idea that our minsters should play at being parish churches, Wyatt's screen in turn has gone, and been replaced by an open erection designed by Sir G. G. Scott, who was more responsible than any other modern 'eminent architect' for the destruction and obliteration of the traditional medieval arrangements of our great churches.

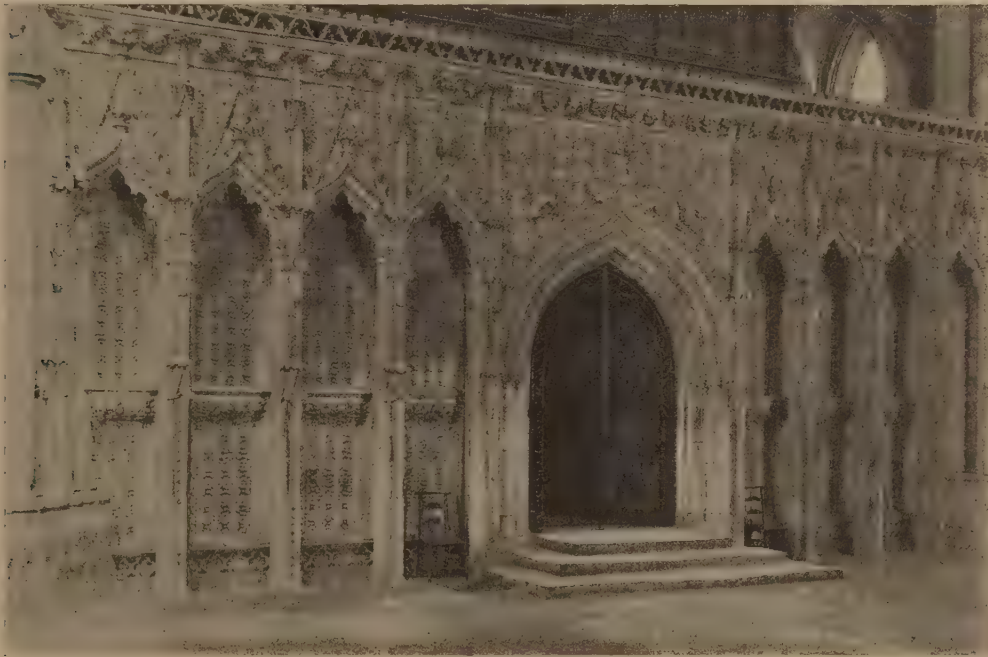


THE PULPITUM IN THE CATHEDRAL CHURCH OF EXETER

(From Britton's *History of Antiquities*, 1827. The panelling at the back of the altar platforms was cut away in 1875)

Published by the *Society of Antiquaries of London*, 1917

images, and an image *in angulo*, were likewise made, all for the decoration of the loft, and a London *imaginator* or image-maker was paid for the work. Lastly, in 1324-5, an iron bar was wrought for carrying the great cross, which was apparently the old rood formerly in the church. The altars under the loft were called Bratton's, and that of St. Nicholas, and were fenced by enterclothes of iron made in 1323-4 and following year. Reference has already been made to the eagle and the organs that stood in the loft.



Photo, S. Smith, Lincoln.

Fig. 3. Lincoln Cathedral Church : west face of the *pulpitum*.

Of about the same date as the Exeter *pulpitum* is the beautiful stone screen at the entrance of the quire at Lincoln (fig. 3). The rich doorway in the middle is here flanked by four tall groined and canopied arches on each side, divided mid-way by carved brackets for imagery. Below these is rich diaper-work, but the similar decoration above the brackets is a late eighteenth-century insertion, and may represent the blocking up of niches that were originally filled with images, perhaps seated figures of kings. There is no trace nor record of any altars. The screen extends backwards for 12½ ft., the thickness being filled on the north by the broad stair up to the loft, and on the south by a vaulted chamber and other features. The quire entry has a flat ceiling carried by a skeleton vault.

The very interesting plan and arrangements of the loft, with its oriel and platform towards the quire for the gospel desk,¹ were fully explained to the Society of Antiquaries in 1898² by Dr. Mansel Sympson. The east front is shown in fig. 4.

The absence of altars against the Lincoln *pulpitum* may be due, first to the fact that the parishioners of St. Mary Magdalene had now got their own church



By permission of Col. Mansel Sympson, F.S.A., and Messrs. Allen and Unwin.

Fig. 4. Lincoln Cathedral Church: east face of the *pulpitum*, showing the oriel towards the quire.

outside the minster, and secondly to the ample space for altars elsewhere in the many chapels provided by successive enlargements of the building.

The fine but much 'restored' *pulpitum* at St. David's was built in the days of bishop Henry of Gower, 1328-47, and is of considerable depth. Its west face seems originally to have had an altar with a reredos of imagery on either side

¹ It is to be borne in mind that in all cathedral, monastic, and collegiate churches the Epistle and Gospel were read from the *pulpitum* to a congregation in the quire and presbytery, and not to any lay folk who might be in the nave.

² *Proceedings*, 2nd S. xvii, 97-106.

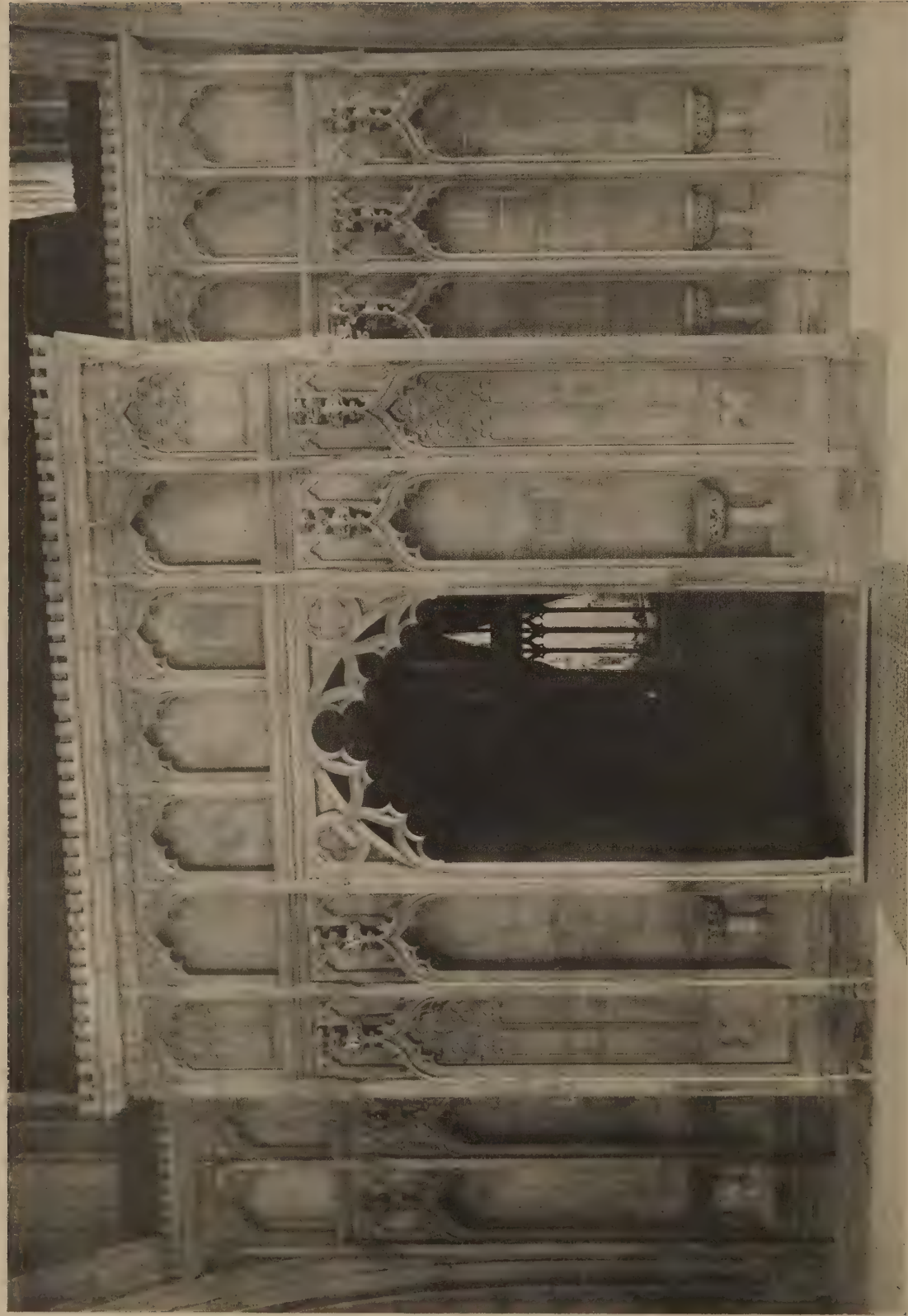


Photo. T. W. Phillips, Wells

WELLS CATHEDRAL CHURCH: THE FRONT OF THE PULPITUM, IN ITS PRESENT STATE

Published by the Society of Antiquaries of London, 1917

the quire entry, but that to the south was destroyed for the insertion of bishop Henry's tomb. Within the entry is a recess on each side with the monumental effigy of a priest, and east of these are deep recesses with doors, one or both of which probably once held stairs up to the loft. The present way up to the loft is outside at the north end, and clearly the result of a modern alteration. The so-called 'sanctuary screen' of wood now in the quire just east of the stalls is in the main of the same date as the *pulpitum*, and seems to have been moved from the line between the first piers of the nave, where it stood upon a platform of three steps as a fence to the nave altars, like the iron grates at Exeter.

The stone *pulpitum* at Wells (pl. XV) follows in date the completion of the new presbytery and quire by bishop Ralph of Shrewsbury (1329-63), and to the east of it were set up the beautiful stalls in making from 1325 to about 1333 at the cost of individual canons.¹ Since no parochial rights were involved, and recent enlargements of the church had provided ample altar room eastwards, the two altars that had stood against the old *pulpitum* were moved elsewhere, and the two flanking altars left in the nave to be contained later in the existing chantry chapels of bishop Bubwith and treasurer Sugar. The new *pulpitum* had a series of five pedestalled and canopied niches with images of kings on either side of the quire entry, and a loft above with panelled front.² The middle section of the screen was unhappily brought forward by Mr. Salvin in or about 1854 to make more room for the huge organ on the loft.

The stone *pulpitum* which stood in place at Chichester until its removal just before the fall of the steeple in 1861 is credited to bishop John Arundel in 1477. Despite its late date, it was of the Exeter type, with three deep vaulted recesses for the quire entry and two flanking altars, behind which were the stairs up to the loft. The altars may be explained by the fact that the parishioners of St. Peter the Great had rights in the nave until 1481, when their altar was transferred to the north transept. The *pulpitum* is preserved at present in the detached bell-tower, but ought of course to be replaced in the church.

The well-known *pulpitum* in York Minster, with its fine array of images of kings (fig. 5), was begun before 1478 by William Hyndley, master mason, who was brought from Norwich for the purpose, with his wife, children, and household goods, in 1473. He was working upon the screen with a dozen other masons

¹ *Archaeologia*, lv, 326.

² That the images, now lost, were those of kings, as in the later screens at Canterbury and York, is proved by proceedings taken about 1513 against one of the annivellers or annuelers, priests who celebrated annual or anniversary masses for the dead, on a charge of adultery. For this offence the sinner was to cause to be painted one of the images before the quire door, *quod depinget unum regem ante ostium chori non pictum incontinenter*, and if he were not indicted before Michaelmas in the king's court *tunc depinget alium regem adhuc non pictum*. H. E. Reynolds, *Wells Cathedral: its Foundation, Constitutional History, and Statutes* (1881), 237.

certainly until 1504, but the screen was apparently not finished until 1515, when Hyndley's successor and ten masons were still working upon it, and the last of the images, that of King Henry VI, was painted. There were no altars against the screen. The great rood seems not to have been set up until 1518.

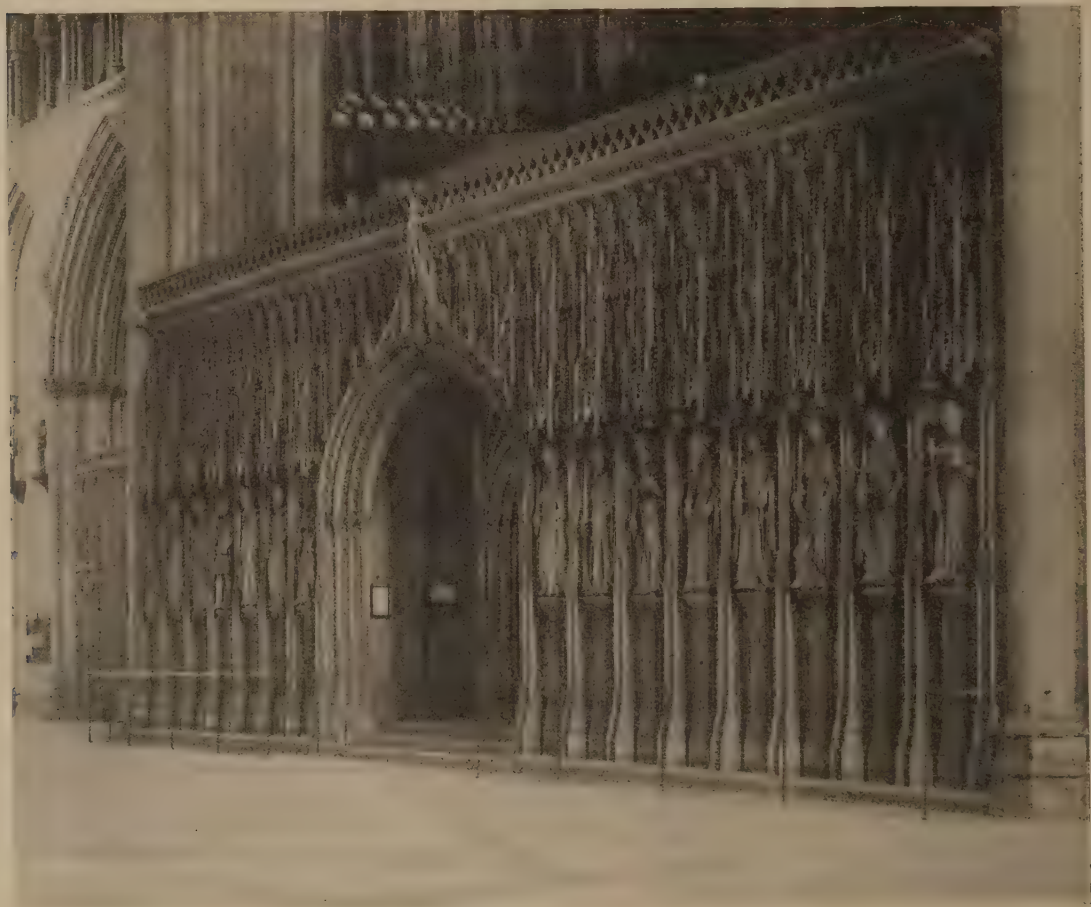


Fig. 5. York Minster : west face of the *pulpitum*.

The system of screens in collegiate, as distinguished from cathedral, churches is not altogether clear.

Collegiate churches were either (i) partly collegiate and partly parochial, or (ii) wholly independent of any parochial rights, and in no way connected with a parish church.¹

¹ Mr. A. Hamilton Thompson, who has made a special study of our collegiate churches, while agreeing that, from the point of view of internal arrangements, this classification is the easiest and

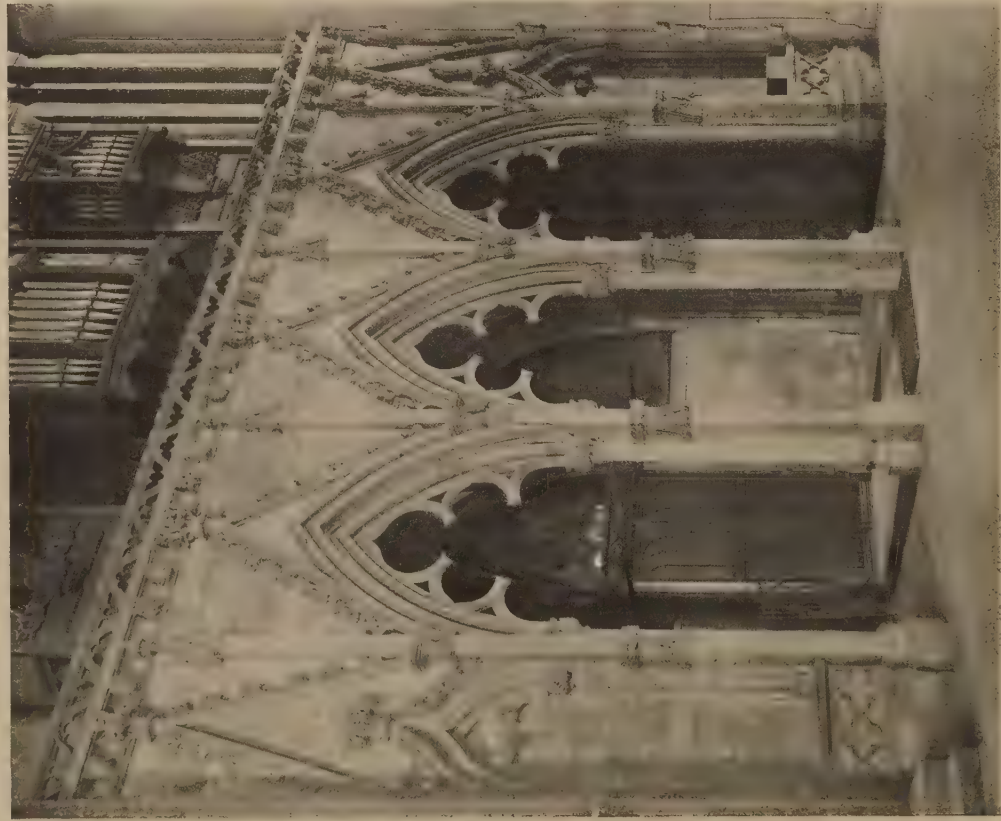
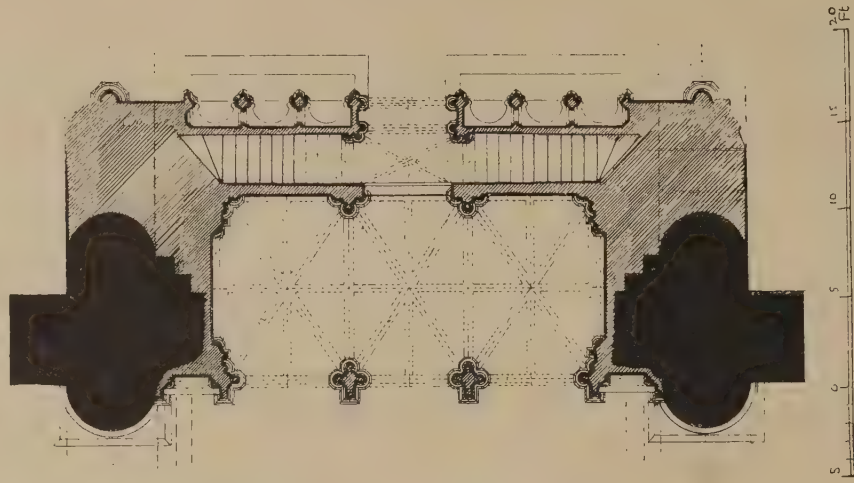


Photo. Alfred J. Loughton, Southwell



SUTHWELL MINSTER: WEST FACE AND PLAN OF THE PULPITUM

Published by the Society of Antiquaries of London, 1917

The first group, which was by far the larger, included

- (a) churches like Southwell, Fotheringhay, and Tattershall, having (apparently) a *pulpitum* only at the entrance of the quire, with altars beneath or against it; or
- (b) cross churches like Ottery, Ripon, and Howden, with a *pulpitum* for the college under the eastern arch of the crossing, and a second screen with the parish altar against it under the western arch. [This section, as will be seen later, forms an interesting link between the single secular screens and the double or compound monastic screens.]

The first group also includes a third class

- (c) of churches like Manchester, Edington, Irthlingborough, etc., which seem to have had an open wooden roodscreen of the parish church type with a wide loft on top that could be used as a *pulpitum* by the college.

The beautiful stone *pulpitum* in Southwell Minster is of early fourteenth-century date, and belongs to the Exeter type, with the loft carried by a tall open arcade with three deep recesses behind, having flat ceilings and skeleton vaulting (pl. XVI). The middle recess forms the quire entry, and opens into a lobby whence stairs ascend right and left to the loft. The side recesses probably held altars as at Exeter, in which case one may have been the parish altar of St. Vincent. The front is flanked by two tall niches, and surmounted by a cornice and pierced parapet. Towards the quire a range of traceried panelling surmounts six elaborately worked stone canopies for the returned stalls, three on either side of the rich doorway (fig. 6).

By a contract made in 1434 there was added to the quire of the collegiate church of Fotheringhay 'a new body of a kirk', consisting of a nave and aisles with western tower and north porch. The new work opened into the earlier quire by three arches filled with screenwork. The contract stipulates that

to the two respownds of the sayd quere shal be two perpeyn walls joyning of freestone clene wroght that is to say oon of either side of the myddel qwere dore; and

clearest for the purposes of this paper, points out (in a letter to the writer) that 'constitutionally there is a wide difference, e.g., between Southwell and Fotheringhay or Howden and Ottery. Southwell and Howden, like most collegiate churches before the end of the thirteenth century, were primarily collegiate, and the parochial altars were merely there on sufferance, as at Lincoln in early times; while Fotheringhay and Ottery were parish churches converted into colleges of chantry priests, the cure of souls being vested in a member of the college. Howden was, of course, a parish church till the middle of the thirteenth century; but the college was founded upon the model of the secular cathedrals, and the parochial aspect of the church became a purely secondary matter.'

in either wall three lyghts, and lavatories in either side of the wall which shall serve for four auters, that ys to say, oon on either side of the myddel dore of the said qwere and oon on either side of the said aisle.

The three arches still retain their stone screens, with later blocking walls above, and the *pulpitum* in the middle has side walls as directed in the contract, filling



Photo, Alfred J. Loughlon, Southwell.

Fig. 6. Southwell Minster: the *pulpitum*, east face towards the quire.

up narrow arches in the line of the nave arcades. How the altars were fenced there is nothing now to show.

The *pulpitum* in the collegiate church of Tattershall is probably the latest of the secular examples (pl. XVII). It is a solid structure of stone, and has on the west side three broad arched recesses, of which the middlemost contains the quire entry; the side recesses held altars. The front of the loft is covered with cusped panels, and has a cresting of Tudor flowers. The stairs up to the loft are on the north side, and on the south is a chamber lighted by three openings towards the quire. Towards the quire, now that the stalls are destroyed, there



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TATTERSHALL COLLEGIATE CHURCH: THE *PULPITUM*, EAST FACE,
SHOWING THE ORIEL TOWARDS THE QUIRE



TATTERSHALL COLLEGIATE CHURCH: THE *PULPITUM*, WEST FACE

shows a blank wall with a doorway in the middle, with the panelled and crested front of the loft above. Over the entrance this is corbelled out as a three-sided oriel towards the quire, like the lofts at Lincoln and Ripon (pl. XVII). This interesting screen dates from 1520.¹

But for disastrous 'restorations' (so called) in the last century the church of Ottery St. Mary would still have exhibited the solid *pulpitum* at the west end of the college quire, under the eastern arch of the crossing, and the roodscreen under the western arch with the parish altar that stood against it between two flanking doorways. The *pulpitum*, which formerly had an altar on either side



Fig. 7. Ripon Minster: west face of the *pulpitum*. (From a photograph by Mr. R. Garraway Rice, F.S.A.)

the quire door, was destroyed about 1830. The roodscreen stood upon a raised platform three steps high running right across nave and aisles, but was swept away, steps and all, by the architect Butterfield about 1851. The side extensions of the platform point to other screens filling the arches at the east ends of the aisles, so completing the barrier between the parish church or nave and the collegiate part beyond.

The 'purpytle', as it was called, in Ripon Minster is contemporary with the quire stalls, which are dated 1494, and has four canopied and pedestalled niches on either side the quire entry, with a row of twenty-four lesser housings in the canopy work above (fig. 7). There are no recesses for altars, but the

¹ There is a full description of the Tattershall screen in an article 'On medieval roodscreens and rood-lofts in Lincolnshire', by Dr. E. Mansel Sympson, in *Memorials of Old Lincolnshire*, 228-30, who has kindly lent his illustration of the eastern face, shown in plate XVII.

pedestals in the two outermost niches are raised on panelled blocks that suggest small altars in front. The nave was and still is a parish church, and apparently had at its eastern end a principal altar against a roodscreen, with others in enclosed chapels, but the evidence for the arrangements is not very certain.

The stone *pulpitum* in the collegiate church of Howden is also late fifteenth century. It is set under the eastern arch of the middle tower, and shows towards



By permission of the Yorkshire Archaeological Society.

Fig. 8. Howden Collegiate Church: west face of the *pulpitum*.

the nave the quire entry with a row of canopied niches on either hand, and a loft with panelled front, partly of open work, above (fig. 8). The fourteenth-century images now in the niches have apparently been brought from the ruined quire, and do not belong to the screen. The parish altar at present stands in front of the quire entry, and has probably been removed thither from against a now-destroyed roodscreen at the east end of the nave.¹

The second group, of churches that were wholly collegiate, included those of destroyed colleges like Rotherham, Pleshy, and Stoke-by-Clare, many of the

¹ A detailed description of the Howden *pulpitum* will be found in a paper by Mr. Aymer Vallance on 'The History of Roods, Screens, and Lofts in the East Riding', in *The Yorkshire Archaeological Journal*, xxiv, 146-8, from which the illustration in fig. 8 has been kindly lent.

college chapels at Cambridge and Oxford, and chapels royal like St. Stephen's in the palace of Westminster and that in the castle of Windsor.

Of the arrangements of St. Stephen's chapel nothing is definitely known, but it seems to have had an isolated quire with *pulpitum*, etc., like that in the cathedral church of Albi in France.

The Windsor chapel was ordered to be built in 1240 for the use of the king, but was entirely refurnished between 1350 and 1353 as the chapel of the newly-founded Order of the Garter. It was in plan a simple parallelogram, some 70 ft. long, perhaps with an eastern apse, and had towards the west end a *pulpitum* shutting off a shallow antechapel which contained within enterclothes two *altaria bassa* or *exteriora*, one being that of our Lady; the high altar was that of St. Edward and St. George.

Many of the college chapels at Cambridge resembled that at Windsor in plan and arrangement (except that none had an apse), and all seem like it to have had the usual minimum of three altars.¹ This was certainly the case in the fourteenth-century chapels of University Hall, Trinity Hall, and Pembroke Hall, in the fifteenth-century chapels of King's College and Queens' College, and in the early sixteenth-century chapel of Christ's College; and probably at Gonville Hall, St. Katharine's Hall, King's Hall, and Buckingham (afterwards Magdalene) College, which are known to have had chapels of similar simple plan.² At St John's College the church of St. John's hospital, which became its chapel, was planned like a friars' church, with a narrow division with steeple over between quire and nave, but was altered in an interesting way to conform to the college type.³

¹ The scholars of Peterhouse at Cambridge used at first as their chapel the adjoining parish church of St. Peter outside Trumpington Gate, but about 1350 this was largely rebuilt, and rededicated in 1352 in honour of the Blessed Virgin Mary. The new building, which is still in use, though now (since the consecration of the present college chapel in 1634) only as a parish church, is an aisleless parallelogram, 100 ft. x 27 ft., of six bays. The three easternmost formed the college chapel and were divided from the rest by a *pulpitum* or rood-loft with two altars against it, which were not hallowed until 1443. Beyond the enterclothes of these altars and in the same line, two chantry chapels were built outside between the buttresses, one in 1443, the other about 1515. The rest of the building served as the church of the parishioners. Willis and Clark, *The Architectural History of the University and Colleges of Cambridge* (Cambridge, 1886), i, 50, etc.

² For this and other information on college chapels, see Willis and Clark, *op. cit.*, and particularly the chapter on The Chapel in vol. iii, 484-501.

³ By an indenture dated 20th June 1516 Thomas Loveday of Sudbury, co. Suffolk, carpenter, covenanted to make twenty-four stalls in the new chapel after the same pattern as those in the quires of Jesus College and Pembroke Hall, 'and a Rodeloft after and accordyng to the Rodeloft and Candell beame in the said Pembroke Hall in Camb. or better in every poynt, wyth Imagery and howsynge, such as shall be mete and convenient for the same warks'. Willis and Clark, ii, 243.

As in the old chapel of Peterhouse, the two 'lowe altars' against the *pulpitum* had chapels in line with them on either side between the external buttresses: that on the north of Hugh Ashton (*ob.* 1522); that on the south of Dr. John Keyton, *c.* 1533.

A similar type of chapel prevailed in some of the Oxford colleges, but in William of Wykeham's New College the antechapel is a short nave with aisles of the same height, thus affording room for two other altars besides those against the *pulpitum* at the entrance of the quire. The same arrangement was adopted at All Souls, Magdalen, and Queen's Colleges.¹

Inasmuch as the chaplains of a college like Stoke-by-Clare or Pleshy only needed a church or chapel of the Windsor or Cambridge type, it is probable that it too had a shallow antechapel with a *pulpitum* and side altars at the entrance of the quire, but until the site of one has been excavated the question must remain an open one.

The college type of chapel was apparently also used by the Knights Templar and Hospitaller. Thirteenth-century chapels of simple rectangular form still exist at Swinfield and Sutton-at-Hone in Kent, at Harefield near Uxbridge,² and in ruins at Ycaveley in Derbyshire. At Temple Balsall in Warwickshire the fine late thirteenth-century chapel is also standing. It is an aisleless parallellogram in plan, and at the Suppression there was 'in the body of the Church: a parclose of olde payntyng tymber devydyng the quyer and the body of the church, wheron stondyth a roode wyth dyvers olde ymages of tymber; and ij alter stones'. This screen, which was clearly a *pulpitum*, cut off the westernmost bay to form an antechapel, like the chapel in Windsor Castle.

Before passing on to the second part of this paper a few words may be said as to the directions given by king Henry VI in 1448 with regard to the 'rode-lofts', as he calls them, to be set up in the chapels of his colleges at Eton and Cambridge.

In the Cambridge chapel there was to be

a reredos beryng the Rodeloft departyng the quere and the body of the chirch, conteynyng in length .xl. fete, and in brede .xiiij. fete.³

This reredos, which was to be of stone, was duly begun, as the existing remains show, but it was not proceeded with, and eventually was replaced, in the days of king Henry VIII and Anne Boleyn his queen, by the magnificent Renaissance wooden loft which still adorns the chapel. The organs apparently were not set up on it until 1606.

The directions as to the Eton chapel are fuller:

Item, in the saide Quere oon either side xxxii stalles and the rode loft there, I wol that they be made in like maner and fourme as be the stalles and rodeloft in the

¹ See a paper by Mr. Aymer Vallance in *The Archaeological Journal*, lxvii, 329.

² Also at Rothley Temple, Dinmore, and Ribston.

³ Willis and Clark, *op. cit.*, i, 369.

chapell of saint Stephen atte Westminster, and of the lengthe of .xxxii. fete and in brede clere .xii. fete of assise.¹

This scheme was superseded by another, called the 'kynges own avyse', for a chapel on a larger scale, containing the direction:

And be hynde the Provostes stall unto the qwere dore .vj. fote, for a wey in to the Rodelofte for redyng and syngyng and for the Organs and other manere observance there to be had after the Rewles of the Church of Salesbury.²

which confirms in an interesting way several of the points already dealt with. Farther on in the 'avise' is a direction for

ij Auters in the body of the seid Church to be sett on every side of the qwere dore;

thus bringing the arrangement into line with others already noted.

Neither of the screens at Eton projected by king Henry was ever begun, but twenty-seven years later, when the chapel was nearly finished, a new rood-loft of wood and quire stalls were contracted for by Walter Nicholl of Southwark, 'karver'. Only one clause of it need be quoted:

And so the same Walter shall make reyre wele clenly sufficiently and workmanly in the newe Chirche of the said Collage of Eton a Rode loft of the lenght of the brede of the said newe Chirche of the whiche Rode loft the utter parte therof toward the Bowke of the same Chirche shalbe made like to the Rode loft late made in Bisshop Wykehams Collage at Winchestre and accordyng to the same fourme. And the inner parte of the said Rode loft with the Garnysshyng of all the stallez of the Quere from the cowtre upward the said Walter shall make like to the Rode loft and Quere of the Collage of seint Thomas of Acrez in London.³

The history of the *pulpitum* and its adjuncts in churches of monks or canons regular is by no means so clear as in the case of secular or collegiate churches.

It has already been shown that a large number of churches of Black Monks and Black Canons were shared with parishioners who had rights in them. This led to a mutual division of the building, whereby the quire part became the church of the convent and the nave that of the parish. Such a division is strikingly illustrated by churches like Bridlington, Binham, Bolton, Waltham, Dunstable, Wymondham, and Crowland, where the conventual part has been ruined or destroyed, while the parochial section of the nave has remained in use.

This division was necessitated by a further consideration. Churches of secular canons had not any dwellings attached to them, and only a few had even a cloister. But a monastic church was that of a community which abode

¹ Willis and Clark, *op. cit.*, i, 354.

² *Ibid.* i, 366.

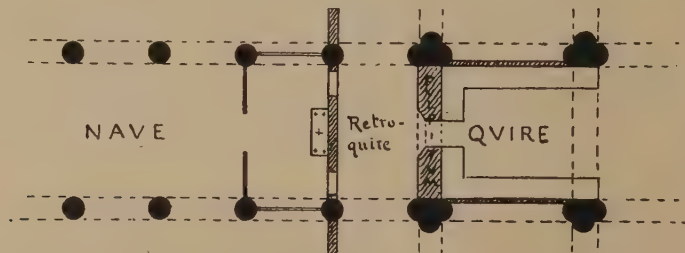
³ *Ibid.* i, 596, 597.

under its shadow, in buildings ranged about a cloister adjacent to it. The cloister alleys moreover were to a large extent lived in, and not mere covered passages about a burying ground as at Wells and Salisbury and Lincoln.

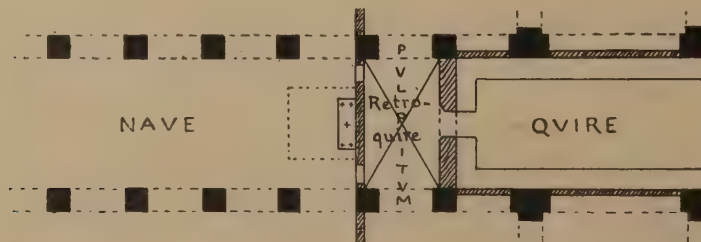
Owing to this intimate relation between church and cloister the quires in the monastic churches largely maintained their original places under the crossing and down the nave, while the secular quires have in every case been moved eastwards, the latest example being in recent years at Hereford, despite the shortness of its presbytery. An original *pulpitum* on the eastern side of the crossing, as at Durham and Bardney, is therefore exceptional, and although many monastic quires were moved eastwards later, in every case the *pulpitum* stood at first under the western arch of the crossing or farther west athwart the nave.

But neither at Durham nor Bardney nor anywhere else did the *pulpitum* stand alone as a solid structure with the quire entry, such as may be seen at York or Lincoln or Tattershall. In a monastic church it consisted of either

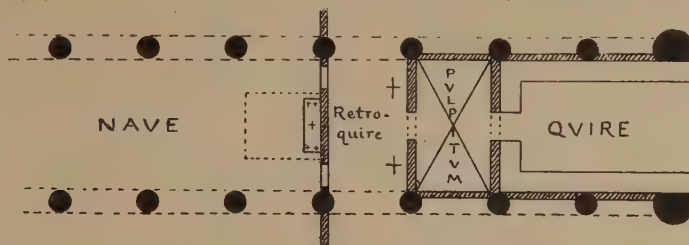
- (i) a solid screen like that at York, but with an open space in front, bounded by a second screen, usually a bay to the west, against which stood the nave altar between two doorways; or



- (ii) of two such screens, or two parallel walls, a bay apart, connected by ceiling over the intervening space, with the nave altar placed against the combined structure; or



- (iii) with the nave altar detached from such compound *pulpitum*, and placed against another screen-wall a bay in advance of it.



In all three forms the doorways that flanked the nave altar opened into the space behind; and the wall against which the altar stood served as its reredos and generally had over it the great rood.

In line with the roodscreen, as the altar-wall may be called, were other screens crossing the aisles, if the church had aisles, and the altar was guarded in front by yet more screens, or by an enterclose like that recorded at Durham.

It is curious to note that the earliest examples in this country of all three types of monastic screen-barriers for which there is either documentary or architectural evidence are practically contemporary; and there is nothing at present forthcoming to show that they were evolved from one simple type. The order given above is therefore based on convenience only and is not chronological.

Although there were large monastic establishments in England prior to the Norman Invasion, practically nothing is known of the arrangement of their quires. And inasmuch as they have all been replaced by later buildings, only some possible excavation can ever tell anything.

There is however one exception to this paucity of material in the case of Christchurch at Canterbury, concerning which Eadmer the singer has left a description of the building that was burnt in 1067.

Here the old high altar was in a western apse, with the archbishop's seat behind it. But an eastern apse had been added, with a new high altar. Eadmer says that this was close to the east wall, and that another altar was placed later in front of it, at a convenient distance, whereat mass was said daily. This altar seems to have been the altar of relics, and stood, with the high altar, upon a platform or presbytery raised above a *confessio* or crypt, which 'had to be ascended by means of several steps from the quire of the singers'. In front of the platform, at the head of a 'flight of steps down to the crypt, was the burial-place of St. Dunstan, west of which stood the morrow-mass altar'. 'Thence,' continues Eadmer, 'the quire of the singers was extended westwards into the body (*aulam*) of the church, and shut out from the multitude by a proper enclosure (*decenti fabrica a frequentia turbae seclusus*).' The nature and character

of this enclosure Eadmer does not describe. Professor Willis suggests¹ that it was 'a breast-high wall, which was intended to keep off the laity, without preventing their view of the ceremonies'. Low screen-walls of this character may still be seen in the churches of Sant' Ambrogio at Milan, San Clemente in Rome, and San Vitale at Ravenna.

Of the arrangements of Lanfranc's church at Canterbury there is no record, but its undoubted plan suggests what they may have been. The church consisted of an apsidal presbytery of two bays with aisles, a middle tower, short north and south transepts with galleries and two-storied apses, and a nave of nine bays with aisles and western towers; there was also a south porch.

The short presbytery probably stood over a crypt, and had the archbishop's seat in the apse with the high altar in front. Several steps must have led down to a platform under the tower on which stood the quire altar, with the upper entrances to the presbytery north and south of it and steps up from the transepts. There would be more steps down to the monks' quire in the nave, which perhaps filled two or even three bays and abutted on the west against a *pulpitum* like that at Ely or St. Austin's Abbey.

The multiplication of screens already referred to was evidently brought about by practical considerations: one being the more effectual barrier thereby interposed between quire and nave; and another, the creation of the area forming the retroquire.

The retroquire was generally directly opposite to or accessible from the entrance into the church from the cloister, and was used for various purposes: among the Cistercians for the *minuti*, or monks who had been let blood, to sit in during such services as they had to attend; at Bury St. Edmunds as the place for penitents under *gravis culpa*, who were not allowed in quire; and at Durham it contained, as elsewhere, a long form for such brethren as were *extra chorum* to sit upon. Sometimes an altar or altars were set up in it.

The barrier caused by the doubling of the screen allowed the parish or nave altar to be used even while service was going on in the quire. But this produced constant trouble and friction, and in many cases the eventual undoing of the arrangement; the parish services being transferred either to another part of the building, or into a separate church built for them.

Of the three classes of monastic barrier-screens that of which there are most examples may first be dealt with, where the quire is or was wholly east of the crossing.

At Durham² and Bardney this has been the case from the beginning of the

¹ R. Willis, *The Architectural History of Canterbury Cathedral* (London, 1845), 26.

² Walcher's church at Durham, which was also cruciform in plan, is definitely stated by the monk Rainald to have had its quire under the crossing.

twelfth century, but both churches replace earlier structures, and elsewhere, as at Christchurch in Canterbury, Rochester, Castleacre, and Crowland, a later rebuilding or extension of the presbytery has been followed (as in the case of the great secular churches) by a removal eastwards of the old quire. In all these cases the *pulpitum* is or was under the eastern arch of the middle tower, and the roodscreen under the western arch: the tower area thus formed the retroquire. In no church are both screens now standing, but the traces of them may often be found on the piers, while at Bardney, Castleacre, and elsewhere their remains have been uncovered by excavations.

Both an earlier and a later *pulpitum* at Durham seem to be described in *Rites*.¹

From this notable record it may be gathered that there was a *pulpitum* contemporary with the first fitting up of the quire in the twelfth century, decorated with two tiers of images of kings and bishops with 'scriptures' under.

The kings, of whom there were sixteen, represented benefactors to the church and formed a lower tier, disposed in two series of eight on either side the quire door. To the south were kings of England from Alured to Henry I; to the north, six kings of Northumbria and two of Scots, Edgar and David. The sixteen images of the upper tier were also ranged in two series of eight, and represented various bishops of Lindisfarne and Durham, beginning with Aidan. The last was Hugh Puiset, often miscalled Pudsey, who was bishop from 1153 to 1195, and the *pulpitum* was probably set up in his lifetime.

This earlier *pulpitum* was rebuilt or new-faced by prior John Wessington, who is credited with the making of '*le Rerdoose ad ostium chori*' at a cost of £69 4s. It is thus referred to in *Rites*:

In the former part of the quire of either side the west dore or cheife entrance therof without the quire dore in the lanthorne were placed in their severall roomes one above another the most excellent pictures, all gilted verye beautifull to behould of all the kinges and queenes, as well of Scotland as England which weere devout and godly founders and benefactors of this famous Church and sacred monument of St. Cuthbert to incite and provoke their posteritie to the like religious endeavours in their severall successions whose names hereafter followeth.²

Two lists are appended, one with thirty-four names, the other with only twenty-eight. The discrepancy is immaterial, since the latest names in both are those of king Henry V of England, who died in 1422, and of his consort, the lady Katharine of France, whom he married in 1420. As John Wessington held

¹ *A Description or Breife Declaration of all the Ancient Monuments, Rites, and Customes belonging or beinge within the Monastical Church of Durham before the Suppression. Written in 1593.* Surtees Soc. 15, ed. James Raine, 1842; re-edited as vol. 107, by the Rev. Canon Fowler, 1903. The revised text is here followed, but extended where necessary.

² *Ibid.* 20.

office as prior from 1416 to 1446, we get an approximate date for the new *pulpitum*. The author of *Rites* in another passage describes the organs that stood upon the loft, and 'a letterne of wood like unto a pulpit' which adjoined them. These will be referred to again later.

Of the corresponding roodscreen *Rites* gives a very detailed description:

In the body of the churche betwixt two of the hiest pillors supportinge & holding up the west syde of the Lanterne over against the quere dore, ther was an alter called Jesus alter where Jhesus mess was song every fridaie thorowe out the whole yere. And of the backsyde of the saide alter ther was a faire high stone wall and at either end of the wall there was a dore w^{ch} was lockt every night called the two Roode Dores for the prosession to goe furth and comme in at,¹ and betwixt those ij dores was Jhesus alter placed as is afforesaide, & at either ende of the alter was closed up wth fyne wainscott like unto a porch adjoyninge to eyther roode dore . . . and in the wainscott at the south end of the alter ther was iiij faire almeries . . . and in the north end of thalter in the wainscot there was a dore to come in to the said porch and a locke on yt to be lockt both daie and nighte: Also ther was standing on the alter against the wall aforesaid a most curiouse and fine table with ij leves to open & clos againe all of the hole Passion of our Lord Jesus christ most richlye & curiously sett furth in most lyvelie coulors all like the burninge gold. . . . The w^{ch} table was alwaies lockt up but onely on principall daies. Also the fore part of the said porch from the utmoste corner of the porch to the other, ther was a dore wth two brode leves to open from syde to syde, all of fyne joined & through carved worke. The hight of yt was sumthinge above a mans brest & in the highte of the said dore yt was all stricken full of Irone pikes y^t no man shold clymme over. . . . Also there was in the hight of the said wall from pillar to pillar the whole storie & passion of o^r Lord wrowghte in stone most curiously & most fynely gilte, and also above the said storie & passion was all the whole storie & pictures of the xij apostles verie artificiallye sett furth & verie fynelye gilte conteninge frome the one pillar to thother . . . and on the hight above all thes foresaide storyes frome pillar to pillar was sett up a border very artificially wrowght in stone wth marvelous fyne coulers verie curiouslie & excellent fynly gilt wth branches & flowres . . . the worke was so fynely & curiously wroughte in the said stone yt it cold not be fynelyer wrowght in any kynde of other mettell, and also above the hight of all upon the waule did stand the most goodly & famous Roode that was in all this land, wth the picture of Marie on thone

¹ One of the injunctions of bishop Richard Flemyng at his visitation of the Black Canons' Priory of Huntingdon, 1421-2, was:

'Item ostia clausure inter navem ecclesie et chorum tempore incepcionis prime misse aperiantur, et finita missa cotidiana de beata Maria claudantur, et clausa per residuum diem penitus conserventur; et ne nimis sit concursus populorum circa psallentes in choro, prohibemus ingressum secularium omnino per dicta ostia ac transitum, cursum et recursum secularium quorumcunque per loca claustralia dicti prioratus haberi, ne devocio psallencium in choro aut quies residencium in claustro per seculares illo aliquid perturbentur.' A. Hamilton Thompson, *Visitations of Religious Houses in the Diocese of Lincoln* (Lincoln Record Society, 1914), i. 74-5.

syde, & the picture of Johne on thother, wth two splendent & glisteringe arch-
angeles one on thone syde of Mary & the other of the other syde of Johne, so
what for the fairness of the wall the staitlynes of the pictures & the lyvelyhoode of
the paynting it was thowght to be one of the goodliest monumentes in that church.

Also on the backsyde of the said Rood before the queir dore there was a Loft, & in the south end of the said loft the clock dyd stand, & in under the said loft by the wall there was a long forme w^{ch} dyd reche from the one Roode dore to the other, where men dyd sytt to rest theme selves on & say their praiers & here devyne service.¹

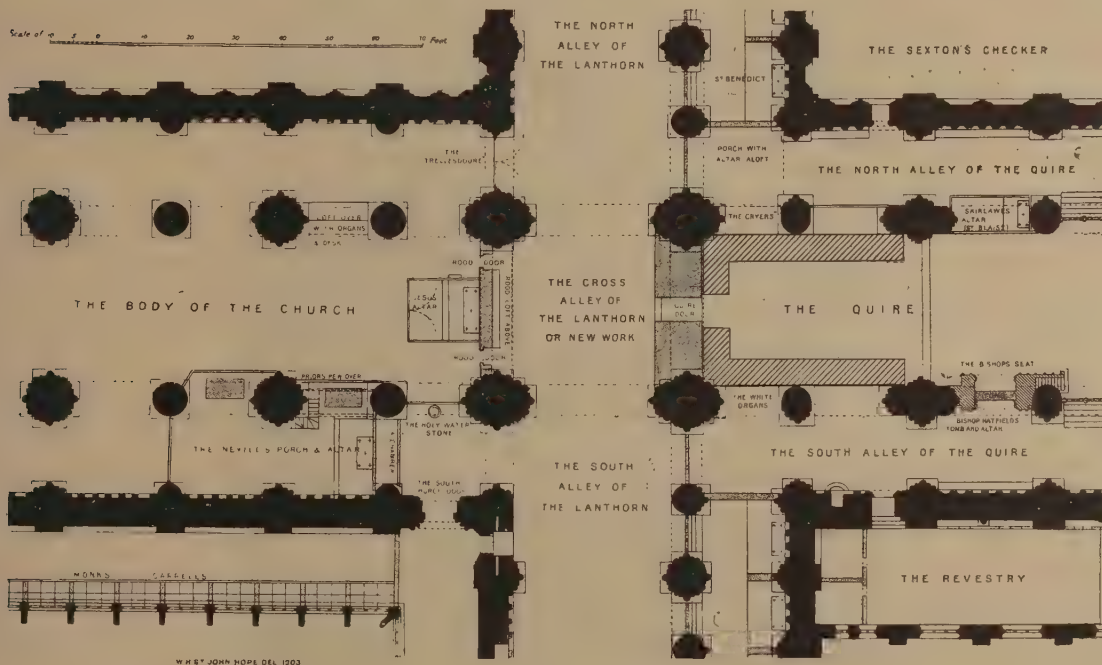


Fig. 9. Durham Cathedral Church : plan showing the ancient screen arrangements, as described in *Rites*.

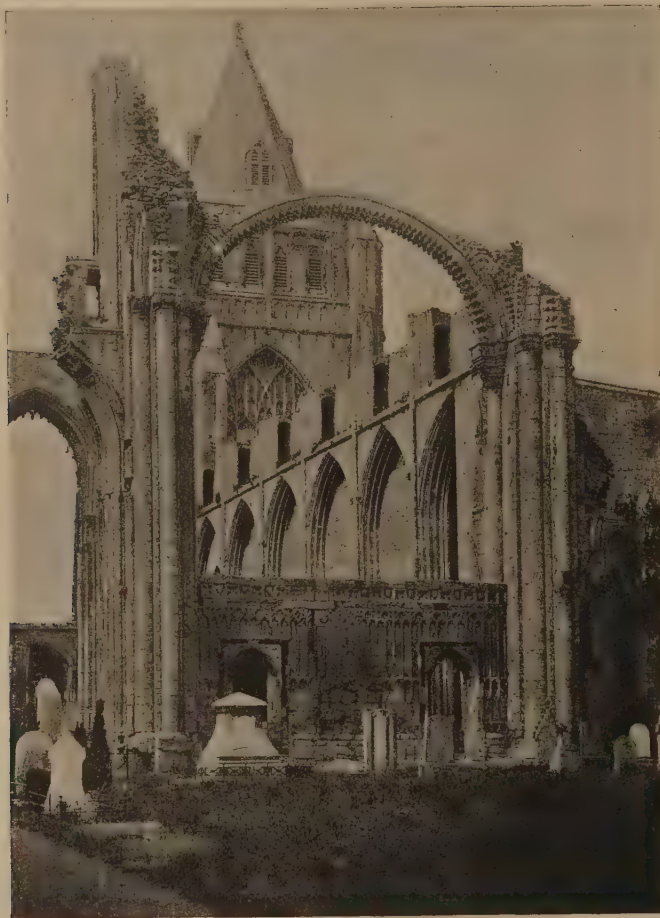
Of the date of this roodscreen nothing is known, but it may have been a rebuilding by prior John Wessington of one that had accompanied the twelfth-century *pulpitum*.

It should be added that the division between the eastern and western parts of Durham was completed on the south by a screening off of the first bay of the aisle to form a porch or entry from the cloister into the transept, and on the north by a lofty wooden screen filling the arch between aisle and transept (fig. 9).

¹ *Rites of Durham* (Surtees Soc. 107), 32-4.

² In an earlier state of things the cloister doorway was in the west wall of the transept, as was also the case at Ely, and the arch in the south aisle was then probably closed by a trellis-screen like that in the north aisle.

This is described in *Rites* as a trellis extending almost to the height of the vault, with its top 'stricken full of Iron pikes of a quarter of a yerd long to thentent y^t none should clyme over it', and in it was 'a trellesdoure w^{ch} did open and close wth two leves like unto a falden dor'.¹



By permission of Mr. Aymer Vallance, F.S.A.

Fig. 10. Crowland Abbey Church : the roodscreen, east face.

Though both the Durham screens have unhappily gone, the screens full of imagery still existing at Canterbury and York enable an idea to be formed of the appearance of the *pulpitum*.² The lost roodscreen, too, can be paralleled by existing examples, notably by that at Crowland, which stands with its two door-

¹ *Rites of Durham* (Surtees Soc. 107), 37.

² Those at Ripon and Christchurch Twynham were of the same type.

ways complete, under the western arch of the crossing (fig. 10). The west face is quite plain, save for a deep frieze of quatrefoiled panels, and was probably covered with carved and painted wainscoting. On the back side the doorways have carved spandrels and the face of the wall is covered with elaborate panelling with traceried heads, all of rich fourteenth-century work, but surmounted by a deep frieze of shields and quatrefoils. Between the doors there was probably a bench as at Durham. The Crowland screen is nearly 15 ft. high.¹

The arrangement of the screens at Bardney is known only by their remains as disclosed by recent excavations. The *pulpitum* is represented by the base of a thick wall just west of the eastern crossing piers, against which the quire stalls were returned. The roodscreen, with the nave altar on its western face, was not under the western arch of the crossing, but between the first pair of the nave piers, with another screen, perhaps with a doorway through, in line with it across the south aisle. Another screen, with an altar against it, crossed the north aisle, but not quite in the same line as the roodscreen. The building of this line of screens at this point across the nave was evidently to allow the cloister doorway to the south to open directly into the retroquire behind them.²

At Castleacre, when the site was excavated in 1889, the bases of both screens were found. That of the *pulpitum*, under the east arch of the crossing, consisted of two parallel walls, about 3 ft. apart, with a deep recess on either side of the quire entry, probably for wooden stairs up to the loft overhead. The wall of the roodscreen extended under the west arch of the crossing, and was 26 in. thick, with the base of a stone bench 1 ft. broad along its eastern face. The jambs of the two doorways had been torn out, but the base of the nave altar remained on the west side and the extent of its platform could be fixed by the limits of the tile paving. There was apparently a fence-screen between the first pair of piers, and north and south there was a chapel in each aisle. That to the south, which filled two bays, was so planned as still to allow access to the church by the cloister doorway.³

¹ The fourteenth-century church of the White Canons' abbey of Leiston in Suffolk apparently had screens of the Durham and Crowland type. According to the Suppression inventory there was the high altar in the quire, a 'saint Mygelles chapell' and 'our Lady Chapell' in the quire aisles. The *pulpitum* was under the eastern arch of the crossing, as appears by the description of the transept altars: 'Item on the Southside of the Quyer dore one lytyll table of alabaster. Item a cloth before the nether parte of the alter of bungey [Bungay] work. Item an other lyke cloth on the northside of the same dore.' 'At the Altar of the Crucifyx', which was that against the roodscreen at the east end of the nave, were 'ij lytyll tables of alabaster'. P. R. O. Land Revenue Bundle 1393, file 136, No. 1.

² In later times the screen arrangements at Glastonbury seem to have been similar to those at Bardney, but the westward position of the roodscreen was ruled not only by the cloister doorway but by the great flight of steps at the end of the nave that led up to the level of the quire and presbytery.

³ See a paper by the author on 'Castleacre Priory' in *Norfolk Archaeology*, xii, 105-157 and especially pp. 111 and 113.

Other examples of the Durham arrangement existed, but as the result, like Castleacre, of later changes, at Christchurch in Canterbury, Christchurch Twynham, Milton Abbas, Carlisle, Rochester, and Hexham, where the *pulpitum* is left in each case; also at Boxgrove, Tynemouth, Waltham Holy Cross, and Wymondham, where in each case the wall of the roodscreen with its two doorways is left.

The existing screen arrangements at Christchurch in Canterbury deserve extended notice on account of their history and recorded dates.

In Lanfranc's days, as already noted, the monks' quire was in the nave, but after the rebuilding of the eastern arm under archbishop Anselm by priors Ernulf (till 1107) and Conrad (till 1126) the quire was moved eastwards of the great tower, where it occupied the same area as now. It was shut off from the aisles, the historian Gervase says, by a wall built of marble slabs (*tabulis marmoreis compositus*), which was probably returned across the west end and had the quire entry through it.

The area of the great tower now became the retroquire, and Gervase describes how 'a *pulpitum*' (or 'screen with a loft' as Professor Willis translates it) 'in a manner separated the aforesaid tower from the nave, and on the nave side it had in its middle the altar of the Holy Cross. Above the *pulpitum* was a beam placed athwart the church, which sustained the great Rood and two cherubim and images of St. Mary and St. John the Apostle.'¹ Gervase further notes that 'from the (north) cross (or transept) to the tower and from the tower to the quire many steps ascended, but from the tower there was a descent through a new door into the south cross; there was also a descent from the tower into the nave through two doors (*per duas valvas*)'.

All these steps were due to the new quire being raised, as it still is, upon a lofty undercroft; otherwise the arrangements correspond with those at Durham.

The screen described by Gervase escaped the fire, for he recounts how the monks 'put together as well as they could an altar and a station for themselves in the nave (*aula*) of the church where they could wail (*ejularent*) rather than sing the day and night hours', and that they placed the relics, etc., which they had rescued as reverently as they could 'in the nave at the altar of the Holy Cross'. The brethren he says 'remained in grief and sorrow for five years in the nave (*aula*) of the church, separated from the people by a low wall (*muro parvulo*)', an arrangement that was evidently deemed indecent.

The Norman *pulpitum*, or whatever formed the western boundary of the quire, seems also to have escaped the fire and to have continued in use in the new work.

The way through it was apparently open, for one of archbishop Robert of Winchelsey's statutes in 1298 enjoins the prior immediately to have constructed a fair and strong wooden door with a strong and decent lock at the entry of the

¹ It is interesting to compare this description with that in *Rites of the Rood*, etc., at Durham.

quire towards the west with a fitting lock so that it can be shut; and let it be kept and shut at the proper times lest free ingress through the quire be open to anyone passing, and so that greater security by this means may be provided for the upper part of the church, where great peril could often threaten.

The archbishop also directs that

the two small doors placed under the great loft between the body of the church and the quire, through the two sides next to the altar under the great Rood of the



Fig. II. Christchurch, Canterbury: east face of prior Henry's *pulpitum*. (From *The Archaeological Journal*, vol. xxxii.)

church, shall remain shut, except by reason of divine service, or when the unavoidable egress and ingress of a minister is imminent, or in time of solemn processions.¹

In 1304-5, following upon the setting up of new stalls in 1298-9, prior Henry of Eastry effected 'the reparation of the whole quire with three new doorways and a new *pulpitum*'. Of the doorways the northern *ostium presbyterii* remains; the *pulpitum* with the third doorway is also in being, though masked eastwards by the present returned stalls, and westwards by a later facing with images of kings.

The beautiful east face of prior Henry's *pulpitum* was temporarily uncovered

¹ R. Willis, *The Architectural History of Canterbury Cathedral* (London, 1845), 110, where the Latin text is given in the notes.

by Sir Gilbert Scott, who in 1875 contributed to *The Archaeological Journal*¹ a detailed account, with excellent illustrations, of its design and arrangement and coloured decoration (fig. 11).

The fine screen with images of the kings (pl. XVIII) is one of the recorded works of prior Thomas Chillenden, 1390-1—1411, who is credited, among other good deeds, with 'the nave of the church . . . with the sumptuous equipment (*apparatus*) of the stair and the *pulpitum* there', etc. This reconstruction of the nave possibly involved the rebuilding of Anselm's roodscreen, but the altar of the Holy Cross was duly replaced.

In the time of prior Thomas Goldston II, between 1495 and (probably) 1501, the buttressing arches were added to the great tower, and it is reasonable to suppose that the altar of the Holy Cross was then removed: probably into the chapel in the north aisle vacated in 1455 by the transfer of the altar of our Lady into her new chapel east of the north transept. Here, apparently, the altar remained until the Suppression. It is described in the sacrist's account for 1531-2 as *altare sancte crucis in navi ecclesie*, but this applies equally well to the position of the old Lady chapel, which is itself described in the list of Chillenden's benefactions as *in eadem navi*. In the great inventory of 1540 the altar appears for the last time as 'the crosse aulter'.

When the buttressing arches were finished the western arch was filled, not by a roodscreen and its altar, but, as shown in Dart's view, by a lofty iron grate carried up to the springing and standing three steps above the nave floor. Mr. Vallance has pointed out the curious fact that it 'should have been fitted with two gates, having an intermediate barrier of ironwork between them; precisely on the plan of the former rood-screen'.² These openings would have served as of old for the passage of the Sunday and other processions. The grate remained standing until 1748, when it was taken down and parts of it transferred to the west and south porches, where they still remain.³ The ironwork seems to be of prior Goldston's time.

Professor Willis suggests that the great rood which was temporarily taken down during the building of the buttressing arches was set up again over the western arch, but there is no evidence of this, and it was much more probably re-erected above the *pulpitum*. This seems borne out by the fact that in 1508 there is mention of the organs 'in le Rode loft',⁴ and the *pulpitum* under this name is the only place for them.

A few words must be said as to the flanking screens at Canterbury. Until

¹ Vol. xxxii, 86-8.

² *Transactions of the St. Paul's Ecclesiological Society*, vi, 193.

³ See *Archaeologia*, lxii, pl. xliii.

⁴ Hist. MSS Comm. Ninth Report, Part I, Appendix, 126.



Photo. Valentine & Sons, Dundee

CANTERBURY CATHEDRAL CHURCH: WEST FACE OF THE PULPITUM

Published by the Society of Antiquaries of London, 1917

1455, when the new Lady chapel was first used, the east end of the north aisle had formed the Lady chapel ever since Lanfranc's time. On the transfer of the altar it may be assumed that the wall against which it had stood was left to continue the line of the roodscreen barrier; and it would of course so serve even if the Holy Cross altar were set up in front of it. On the south side the arrangement was different, and the arch into the transept was open for the passage of pilgrims. But the existing wall down the side of the great flight of steps, and a door therein,



Fig. 12. The *pulpitum* at Christchurch Twynham, Hants. (From *The Archaeological Journal*, vol. v.)

formed the southern boundary of the retroquire, and an iron grate and doors stood athwart the quire aisle at the top of the steps to the upper church.

The interesting mid-fourteenth-century *pulpitum* at Christchurch Twynham in Hants has been well described in *The Archaeological Journal* for 1848 by the late Mr. Benjamin Ferrey.¹ It is of stone, 33 ft. wide and 16½ ft. high and 9 ft. deep, and stands 6 ft. in advance of the eastern piers of the crossing (fig. 12). It has a plain plinth, with a deep band above of cusped quatrefoils with shields, upon which stand two series of canopied niches or housings, five on either side the quire doorway in the middle. In each housing is a pedestal for an image, formed of four clustered

¹ Vol. v, 142-5 and plate opposite p. 73.

shafts with sculptured capitals. The doorway has a horizontal lintel like the old Salisbury screen. Above the housings is a second but continuous row of twelve shorter niches, of which the two middlemost are narrower than the rest. Owing to the projection of the screen westwards, both tiers of niches are returned across the ends, as at Wells and Exeter. Within the entry on the north side is an ascending flight of steps to the loft. The effect of this fine screen is of course greatly marred through the loss of its images.

The corresponding roodscreen under the western arch of the crossing has been destroyed.

I have no data concerning the *pulpitum* at Carlisle or that at Milton Abbas, but something must be said about the curious example at Rochester.

The eastern part of the church there was rebuilt on a much larger scale during the first quarter of the thirteenth century, and in 1227 the quire which formed the western half of the new work was used for the first time. The monks' massive oak forms of that date remain, and the eastern side, also of wood, of the *pulpitum*. This is wainscoted for several feet above the backs of the stalls, and was once decorated with rude thirteenth-century painting. Above the wainscoting is an arcade, originally open, of small trefoiled arches carried by slender octagonal shafts, now boarded up and painted. The whole was surmounted by a moulded rail. The doorway was square-headed, and the stalls right and left of it, of the bishop and the prior, seem to have had canopies with carved figures of angels. There was no tower over the crossing until late in the thirteenth century, and soon after that was built the western face of the *pulpitum* was reconstructed in stone, with a moulded doorway in the middle and a recess for an altar under its northern half. The southern half probably contained the stair to the loft. The screen now has a flight of ten steps from the crossing up to the doorway, and its old plain front has been covered with modern imagery, but originally the steps probably formed a platform across its width, as at Canterbury.

When the tower was built preparations were made for a tall stone screen athwart its western arch, which accordingly has the bases of its shafts stopped at the level of the top of the screen. Against the screen, which represented an earlier one, probably on the same line, stood the parish altar of St. Nicholas. This altar is named in a charter of 1107 and remained in the nave until 1423, when, following upon the usual quarrel, it was transferred into a new church for the parishioners which was built outside. After this there is no further record of a nave altar and it is possible that the screen was removed at the same time. Henceforth the rood seems to have stood upon a loft in front of the large arched recess in the north transept, and various wills from 1480 onwards refer to it. The altar within this recess was known as the rood altar and later as the altar of Jesus.

The only other wooden *pulpitum* except the one at Carlisle, of which I have no notes, is that under the eastern arch of the crossing of the priory church of Hexham (fig. 13). It is of late fifteenth or early sixteenth century date, being the recorded work of prior Thomas Smithson (1491-1514), and has to the front five compartments, the middlemost of which forms the entry to the quire. This is flanked by the other compartments, which stand upon a stone plinth



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Fig. 13. Hexham Priory Church: west face of the wooden *pulpitum*, before recent mutilations.

and are panelled as to their lower parts and have elaborate flamboyant tracery above. Over the compartments is a groined cove carrying the front of the loft, which has a continuous row of twenty-one canopied housings for images, all now gone. The loft down to 1859 was reached at either end by a stone vice, but neither is now standing. The loft was originally 8 ft. wide with a panelled front coved out towards the quire, with a polygonal bay in the middle like the screens at Lincoln and Tattershall. The total height was 17 ft. and the

depth $5\frac{1}{2}$ ft., but in recent years these dimensions have been altered to make more room for the organ. The whole *pulpitum* was richly decorated with painting and gilding, remains of which may still be seen.

Both screen and loft have suffered drastic treatment at the hands of the 'restorers', as may be gathered, first, from the descriptions and illustrations in Mr. C. C. Hodges's fine monograph on the church,¹ and secondly from a paper by Mr. Aymer Vallance on 'The Pulpitum and Rood-Screen in Monastic and Cathedral Churches' in the *Transactions of the St. Paul's Ecclesiological Society*.²

Whether there was a nave in being at the suppression of the priory, and whether it contained a roodscreen or parish altar, are questions that I have not yet been able to solve, but apparently the parish church was a separate building to the south-east. There is, however, preserved in the priory church a series of painted and traceried panels, with five others at a higher level breaking forth pulpit-wise, of late fifteenth-century work, which is called 'the old pulpit'. It is $15\frac{1}{2}$ ft. long, and in a plan made by John Carter about 1780 is shown standing against the wall then blocking the east end of the nave.³ It is suspiciously like the upper part of a roodscreen.

Of cases where only the western screen is left, mention has already been made of that at Crowland. Reference may, however, also be made to those at Boxgrove, Tynemouth, and Dunstable, as well as to the peculiar example at Wymondham. The western screen is also left at Waltham Holy Cross and a few other places.

The parish church of Boxgrove was given in the first quarter of the twelfth century to a small priory of Black Monks brought hither from the abbey of Lessay in Normandy, who seem to have begun to the east of it a cruciform church. The work was resumed after a considerable interval late in the century, when the tower was carried up on new piers and the parish church rebuilt to form the nave. In the middle of the thirteenth century the priory church was greatly enlarged by a rebuilding of all east of the transepts.

The monks' quire was probably at first under the tower, with the *pulpitum* in the first bay of the nave, and the roodscreen between the second pair of piers. When the eastern arm was rebuilt the quire was moved into it, and the *pulpitum* re-erected under the eastern arch of the tower. But the roodscreen, being the barrier between the monks and the parishioners, kept its place in the nave. After the Suppression the grantee, Lord La Warr, seems to have transferred the monastic church to the parishioners, who thereupon continued the roodscreen wall up to the vault and pulled down their own church west of it. It

¹ C. C. Hodges, *The Abbey Church of Hexham* (1888), 47, 48, and pls. 43-6.

² Vol. vi, 185-200.

³ Hodges, *op. cit.*, 47 and pls. 47, 48.

thus happens that the roodscreen forms the lower part of the present west wall of the church (fig. 14). I have not seen it for some years, but it has a round-headed doorway at each end and the altar space between has a recess in the wall right and left of it (fig. 14). The wall is apparently of the twelfth century. In line with it across the south aisle (there is no aisle to the north) is another wall



Lent by Mr. Aymer Vallance, F.S.A.

Fig. 14. Boxgrove Priory Church : the roodscreen, western face.

closing up the arch, but with a fourteenth-century doorway in the middle (now blocked).

About 1195 the priory church of Tynemouth in Northumberland, which had till then consisted of an apsidal presbytery with ambulatory and chapels, a tower and transepts, and a nave with aisles, was considerably enlarged and extended east of the crossing. The quire seems at first to have been in the nave, but was now moved into the new work and the *pulpitum* set up in the

eastern arch of the tower. The line of the roodscreen was also moved eastwards, but only to the west side of the tower, where the new screen yet stands in the middle of the ruins of the church. It is a thin wall of stone, of no great height, showing to the west a plain surface against which the nave altar stood, with a round-headed doorway right and left. On the eastern face the doorways have segmental rear arches with dog-tooth ornament, and between them is an arcade of five narrow pointed arches carried by detached shafts (now gone) with carved capitals and moulded bases, standing upon a bench-table. The wall is surmounted by a string-course with dog-tooth ornament, and has raised upon it the remains of a rubble wall, probably to form a division between the monks' church and the parish church in the nave.¹ There are no traces of the *pulpitum*.

The roodscreen that formed the division between the parish church and that of the Black Canons at Dunstable in Bedfordshire was fully described and illustrated by Mr. Worthington G. Smith in a paper communicated to the Society in 1910 and published in its *Proceedings*.² It is therefore only necessary to repeat that it is a stone wall which has towards the nave interesting traces and remains of the altar and its reredos, with the usual flanking doorways, all of late fourteenth-century date. The wooden fence-screen to the nave altar, though largely 'restored', is also preserved, and has lately been moved back from the west end of the church to its probable original place.

The screen arrangements in the priory church of Wymondham were somewhat unusual. The twelfth-century tower over the crossing seems either to have collapsed or been taken down early in the fifteenth century, and in its stead a new tower was built directly over the retroquire, which occupied the first three bays of the nave. The north and south walls of this new steeple were formed by walling up all the openings of arcade, triforium, and clerestory, and then building up a square tower surmounted by an octagonal belfry. The eastern side of this rested upon a lofty arch spanning the church, and the western side upon a solid wall starting from the floor. This wall is perfectly bare for the whole height towards the nave, and the altar that stood against it was flanked, as far apart as possible, by two very small and narrow doorways opening eastwards. This thick western wall of the tower thus forms the roodscreen!³ There are now no remains of the *pulpitum*. It apparently stood, not under the eastern arch of the new tower, but a few feet to the eastward in its original place on the west side of the old crossing. The present tower arch has a number of

¹ See a paper by Mr. W. H. Knowles, F.S.A., on 'The Priory Church of St. Mary and St. Oswin, Tynemouth, Northumberland', in *The Archaeological Journal*, lxxvii, 1-50.

² 2nd S. xxiii, 154-7.

³ See the plan of the church in *Archaeologia*, xxvi, pl. xxx, opp. p. 292.

holes drilled at regular intervals for some way up on the inner faces, as if for the insertion of a metal grate or enterclose to altars against the *pulpitum*, but it is uncertain if this was actually fixed.

The next class of screen consisted of two parallel walls, with the retroquire that formed the intervening bay roofed or ceiled over to form the *pulpitum* and roodloft. The eastern wall had the quire entry in the middle, but the western wall had two doorways, one at each end, with the nave altar between them on its front. Above the screen was the great rood.

From the earliest example that can be described having been at Ely, screens of this form may be said to belong to the Ely class.

The monastical church of Ely was begun by abbot Simeon (1081-93), continued by his successor, and finished in the days of the third of the bishops of Ely, Geoffrey Ridel (1174-89).

The stalls of the monks extended under the middle tower and into the first bay of the nave, and there abutted against a *pulpitum* which filled the second bay and had the cloister entrance directly to the south.¹ The *pulpitum* in question is that which forms the main subject of this paper (pl. IX).

The western face of the screen was of stone, and had the altar of the Holy Cross in the middle, with the procession doors on either side. Before this altar the second bishop, Nigellus or Neel, was buried in 1169, and not improbably the screen was set up early in his episcopate, which began in 1133.

The front of the screen had other screens, also of stone, in line with it across the aisles,² and the altar was protected by screens within the flanking arches and by another in front of it between the next or third pair of piers.

The altar of the Holy Cross is mentioned in the sacrist's account for 1291-2, and served as the altar of the parish of St. Peter until 1360, when, in consequence of the usual discord produced by the simultaneous performance of the monastic and parish offices within so short a distance of each other, a separate church was built for the parishioners against the north wall of the nave (since destroyed). In the record of its consecration by bishop Simon Langham (1362-66) it is called the church of St. Cross. But the altar in the nave remained, and is referred to in later accounts as *altare ad crucem*.

The *pulpitum*, or at any rate the western face of it, escaped destruction when the middle tower collapsed in February 1321-2, but the plan of the church published by Browne Willis in 1730 suggests that the eastern side had undergone alteration when the new stalls were set up in the octagon, since they abut against it in an unusual way. The same plan shows a vice in each end of the retroquire, but differing in size and form, and apparently a row of posts behind

¹ There was however, as at Durham, an earlier cloister entrance into the south transept.

² There are housings for images which were connected with these on the pillars in both aisles.

the west wall. The posts were probably for the greater security of the organ that stood upon the loft, but they may have been connected with the seats placed in the western part of the loft for the bishop, dean, and prebendaries, when sermons were preached in the nave. This may also explain why there were two stairways up to the loft.

The *pulpitum* as shown in Browne Willis's plan remained in place until

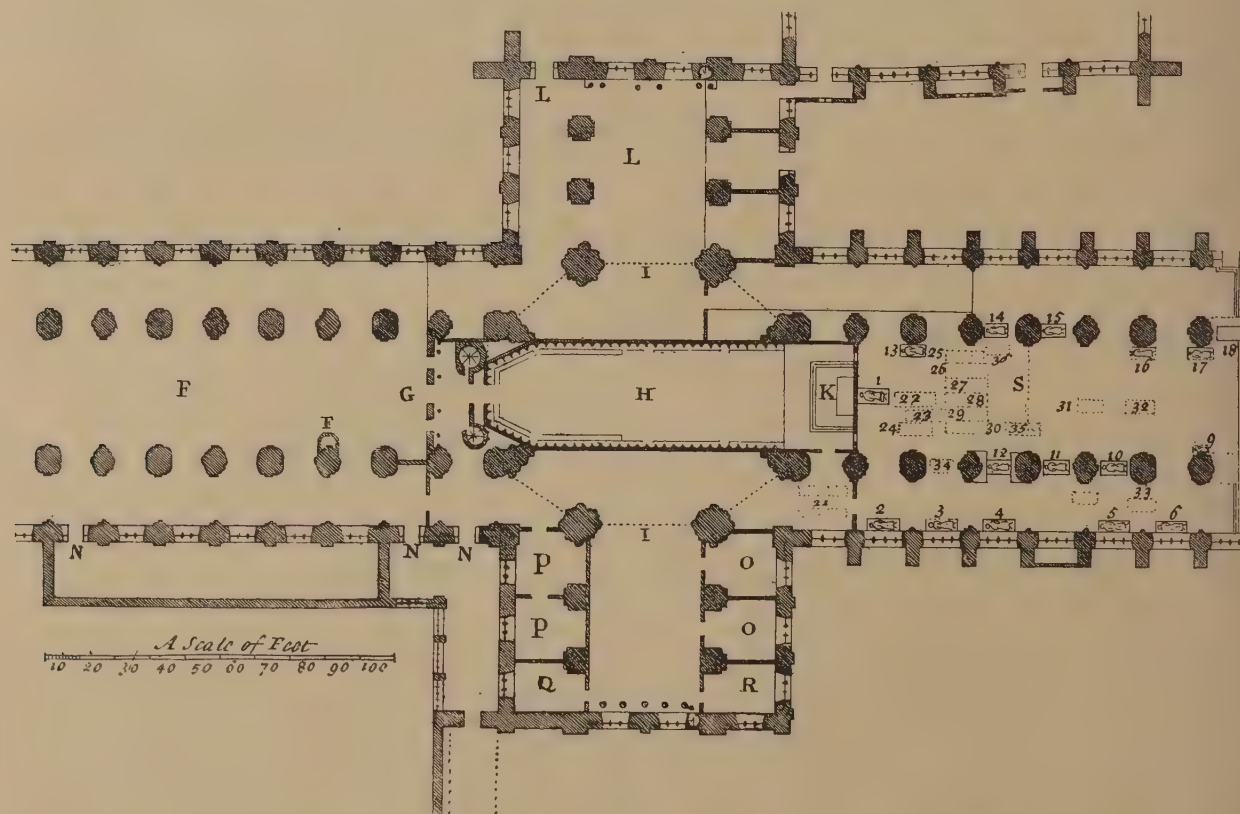


Fig. 15. Ely Cathedral Church: part of B. Willis's plan showing the positions of quire and *pulpitum* down to 1770.

1770, when the stalls were moved eastwards into the presbytery. The screen was not however moved with them, but taken down and broken up.

James Essex, the architect responsible for this unwarrantable act of barbarism, made, as has already been noted, a number of sketches of parts of the screen before its destruction, from which it has been possible to restore it on paper (pl. IX). Essex also wrote a description of the screen for Mr. James Bentham's *History of Ely* in which he says:

The front of it was a solid wall, pierced with three doors, and decorated with

small pillars and feint arches, behind [? above] which was a low arcade which supported the rood loft, the walls or battlements of which are composed of open-work of little pillars and circles. The way up to this gallery was by a stone staircase, on the north side, still remaining.¹

From the limits of the limewash on the piers, which was not added until after the *pulpitum* had been set up, it can be seen that the front wall stood immediately to the west of the vaulting shafts, with its face almost flush with the inner shafts of the nave arches, and that it was 2 ft. 6 in. thick. Its extreme width was 32 ft. 9 in. and its height from the floor 14 ft. 6 in.

According to Essex's sketches (pl. X) the wall had a plain base or plinth of masonry, upon which stood the arcade and doorways. The large middle opening is shown cut down to the floor to form the quire entry, but the two side openings retain their original level. The altar platform must therefore have extended in front of and beyond them and was perhaps two steps high. The middle opening was like a tall doorway of three orders and $4\frac{1}{2}$ ft. span. Originally however it must have been a recess, in front of or within which stood the altar of Holy Cross, and its narrowness is quite in accord with what is known of the size of twelfth-century altars. The recess was flanked by two tall and narrow stilted arches, with shallow niches of half their height at the back, and beyond them were the rood doorways. These were 2 ft. 10 in. wide, and $6\frac{1}{2}$ ft. from the sill to the springing. The outer arch had apparently a plain roll resting on grooved shafts, but there was an inner arch springing from square jambs with capitals like the outer shafts. This inner arch was segmental, with a single row of voussoirs joggled together, and the space above was filled in, tympanum fashion, with squared blocks of *opus reticulatum* set lozengewise.² From the rood doors to the vertical member next the piers the wall space at each end was covered by two tall and round-headed 'feint arches' as Essex calls them. The outer member of the altar recess seems from his sketch to have been carved with two concentric rows of zigzag mouldings.

At about $11\frac{1}{2}$ ft. from the floor was the open parapet to the loft. It was just 3 ft. high and consisted of a row of thirteen pierced and moulded quatre-foils, alternating with small clustered shafts. These stood upon a string-course with zigzag moulding, and along the top edge was a similar moulded string-course, but of different pattern. This parapet may be of later date than the screen which it surmounts.

¹ James Benthams, *History and Antiquities of the Cathedral Church of Ely*, 2nd edition (Norwich, 1812), Addenda, 3.

² In the north aisle of the infirmary hall at Ely is a doorway with similarly joggled lintel and a tympanum filled in with *opus reticulatum* of somewhat unusual pattern. But apparently it is of somewhat later date than the *pulpitum* and has an outer moulding like that used by the builders of the added stage of the Galilee.

The nave altar probably survived the suppression of the monastery, but was afterwards removed, its platform taken away, and the recess opened out to form a more convenient quire entry than the smaller side doors. Whether these were then walled up is not known; Browne Willis shows them as open.

Of the same class as the Ely *pulpitum*, and apparently of even earlier date, was that at Winchester.

Here the quire, as it does yet, extended under the tower and into the nave, where the stalls abutted on a *pulpitum* filling the second bay. Owing however to the crypt that underlies presbytery and quire, the *pulpitum* stood upon a raised platform, with steps at each end up to the retroquire, and others, now in two series of four, from the nave altar down to the nave level. The cloister doorway opened directly opposite the retroquire.

From the existing state of the nave piers north and south of the platform it is clear that the *pulpitum* was a contemporary work with them.

According to Rudborne, bishop Walkelin, the first builder, 1070—1097-8, was buried 'in navi ecclesie ad gradus sub pulpito in quo', he notes, 'erigitur crux argentea magna Stigandi archiepiscopi cum duabus imaginibus argenteis magnis, ad pedes videlicet Willelmi Gyffard quondam Wyntoniensis episcopi', who succeeded Walkelin and died in 1128-9.

The *Annales* of Winchester also relate how Stigand 'de donis Emme regine condidit magnam crucem cum duabus imaginibus, scilicet Marie et Johannis, et illas cum trabe vestita auro et argento copiose dedit Wintoniensi ecclesie'.

The eleventh-century *pulpitum* seems to have survived the great alterations made by William of Wykeham, and continued down to the reign of king Charles I, when it was superseded by a classical screen wall designed by Inigo Jones with bronze effigies by Le Sueur, completed in 1639, of king James I and king Charles I.¹ This was removed in 1820 and replaced by a 'Gothic' screen designed by Mr. Garbett, on which however the images of the kings were retained. This screen in its turn was destroyed by Sir G. G. Scott and a new thing, copied from the fourteenth-century stall canopies, erected behind the returned stalls. The images were then set up on either side of the great west door,² where they still remain. The pieces of the Inigo Jones screen, after lying for years in the triforium, were offered in February 1909 to the Mayor and Corporation of Winchester,³ but were then too fragmentary to be used, and the

¹ See the engraving in Britton's *Cathedral Antiquities*, iii. Winchester, pl. x, and the facsimile of Inigo Jones's original design in *The Architectural Review*, xxix, 130. It is interesting to note this late survival of the traditional decoration of a *pulpitum* with images of kings.

² A similar treatment was meted out to a fine classical organ screen in Beverley Minster by Sir Gilbert Scott. It had upon it leaden images of king Athelstan and St. John of Beverley.

³ See an article in *Country Life* for May 22, 1909, on 'Tampering with Ancient Buildings, IV' (p. 747), where the successive screens are illustrated.

doorway eventually found its way to Cambridge, where it has been built up in the new Museum of Archaeology.

Stigand's silver rood also existed down to the Suppression, and is thus described in an undated inventory of that time:

Item in y^e body of y^e church a gret crosse and the image of Christ & marie & John being of plate silver and partlye gilt.¹

Concerning the dedication of the nave altar, and the various transverse and protecting screens in connexion with it, no information at present is forthcoming.

The only example of the Ely class of screen now standing is at St. Albans. Here the whole church seems to have been built by abbot Paul of Caen, who ruled from 1077 to 1093, and it was hallowed in 1115.

The quire of the monks occupied the space under the great tower and two bays of the nave, a position it always retained despite later changes east and west. The stalls abutted against a *pulpitum* filling the third bay. This had against it a rood altar, hallowed by Godfrey bishop of St. Asaph in 1163 or 1164.

Early in the thirteenth century the *pulpitum* seems to have been rebuilt for reasons which are set forth in the *Gesta Abbatum*:

In the time of abbot William of Trumpington [1214-35] when master Walter of Colchester, then sacrist, an unrivalled painter and sculptor, had completed a loft in the middle of the church with its great Cross and Mary and John, and other carvings and suitable structures at the cost of the sacristy, but without sparing his own labour, abbot William himself solemnly removed the shrine with the relics of blessed Amphibalus and his friends, from the spot where it had formerly been placed, that is to say, near the high altar close to the shrine of St. Alban on the north side, unto the place in the middle of the church which is enclosed by an iron latticed railing, a most beautiful altar being made there with a table and superaltar painted at great cost. And he caused the altar solemnly to be dedicated in honour of the Holy Cross, because it had before been the Holy Cross, and in honour of St. Amphibalus and his friends, because their bodies rest there, by John bishop of Ardfert (1215-21).² And by him he caused the great Rood placed over that altar with its images (i. e. St. Mary and St. John) to be hallowed.

In 1323 part of the south side of the nave fell down, and apparently involved the *pulpitum* in its ruin. The rebuilding of the arcade was finished about 1345, under abbot Michael of Mentmore, for whom

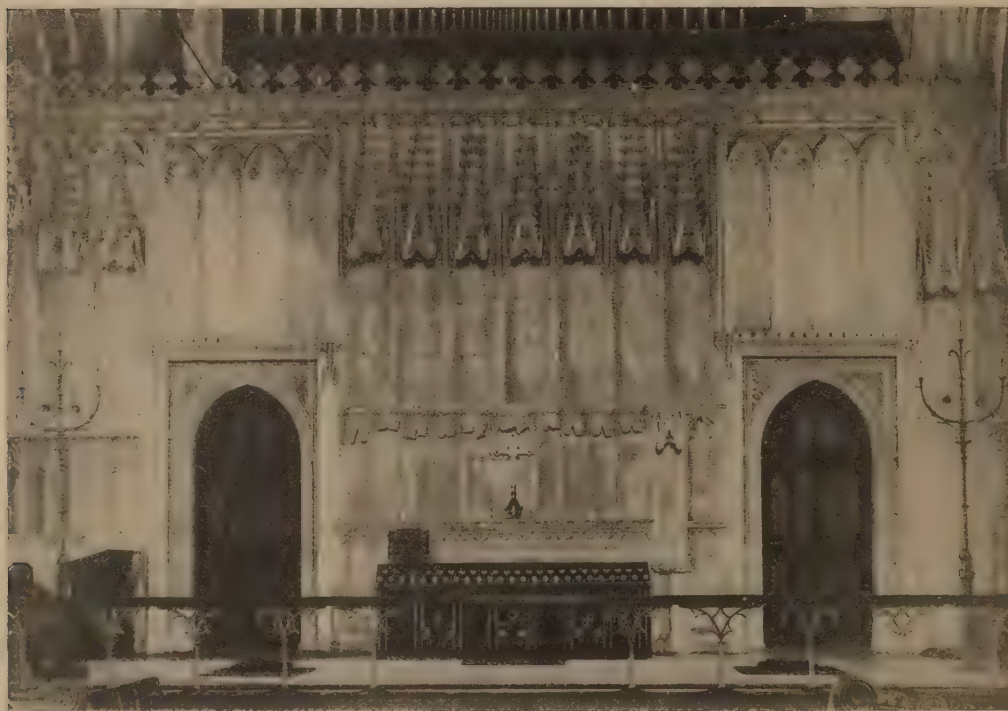
Dan Hugh archbishop of Damascus hallowed three altars in the south part of the church newly builded, namely of St. Mary, of St. Thomas archbishop of Canterbury and St. Oswin, and of St. Benet and other doctors.

¹ C.C.C. Camb. MS. CXI. 355.

² Mr. C. R. Peers thinks that this *pulpitum* was begun in the time of abbot John of the Cell (1195-1214), as a gift to the altar of the Holy Cross and St. Amphibalus of 1208 is mentioned in Cott. MS. Julius iii. 33 (*Victoria County Histories, Herts.* ii, 485).

There are reasons for supposing that these altars stood severally under the three westernmost of the newly built arches.

Following on this work came the existing front of a new *pulpitum* (fig. 16). It is about 3 ft. thick and built of clunch, and has in the middle a row of niches for images as a reredos to the altar, with a canopied lavatory at the south end. Above the reredos is a range of seven canopied housings for more images.



Photo, Cherry & Co., St. Albans.

Fig. 16. St. Albans Abbey Church: the *pulpitum* or rood screen, west face.

Right and left of the altar are the rood doorways. These are set within square-headed recesses, and have pointed heads with carved spandrels: they still retain their richly carved and panelled wooden doors. Over each doorway is a row of four panels in cusped heads, and beyond them was similar panelling below for half the height and then two more housings above like those over the altar. At the north end this arrangement was disturbed by prolonging the wall northwards and inserting a reredos with groined canopy in place of the panelling. Two more, but taller, niches have been added beyond the original two, and another of the first type at the end, making an uneven group of five. The whole height is about

20 ft., and it is finished along the top by an ornamental cornice and cresting. The eastern face is covered with panelling.

Dr. Nicholson in his guide-book to the abbey church¹ states that 'when the present floor of this aisle was laid, a wall was found running in a continuous line

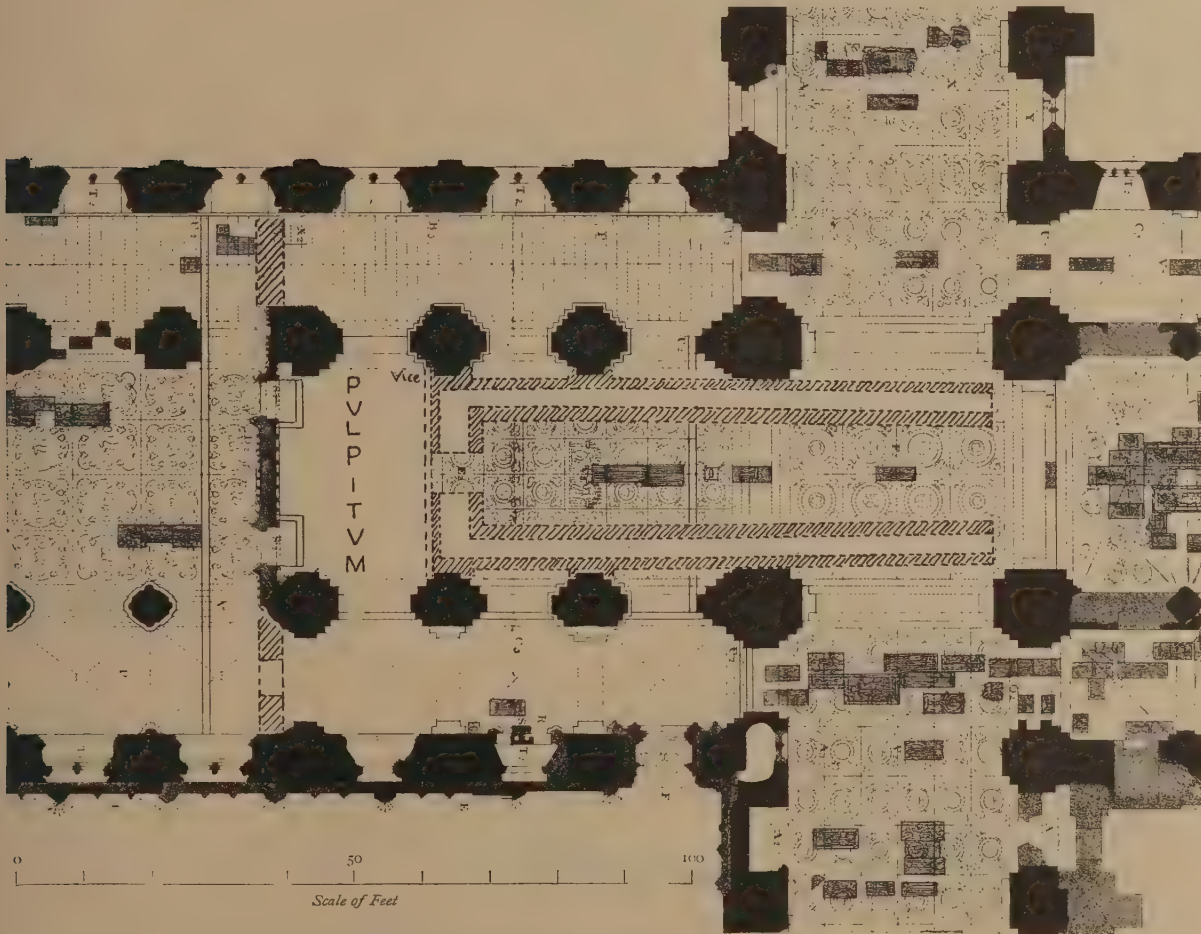


Fig. 17. St. Albans Abbey Church: plan of the quire and pulpitum. (From the plan by John Carter, published by the Society of Antiquaries in 1810, with the quire arrangements, etc. added.)

with St. Cuthbert's screen [as it was miscalled in his day] across the aisle, and three feet thick. It was formed of Roman brick and flint, and lay upon the bed of an old flooring seventeen inches below the present level.' There must likewise have been a screen across the north aisle, but for this there is no historical evidence.

¹ Second Edition, 1857, p. 64.

Most of the plans of the church down to Lord Grimthorpe's destructive 'restoration' show two ancient steps that formed the platform on which the *pulpitum* stood (fig. 17). They crossed the nave and its aisles just east of abbot Paul's fourth pier, but are now represented by three modern steps on the western side of the pier.

In the Annals of John Amundesham, who flourished during the first quarter of the fifteenth century, is the following note :

In the body of the church are three altars placed in order before the Holy Cross in honour of the Blessed Virgin Mary, of all the Apostles, Confessors, and of St. Benet, and of St. Thomas the Martyr and St. Oswin, which altars were removed and reverently placed as we see by the care of Dan Thomas Houghton formerly sacrist of this church, who out of devotion of the Holy Cross caused the Rood Mary and John to be painted curiously . . . and the three altars under the aforesaid Cross were hallowed by the bishop 'Horrensis', of the kingdom of Hungary, in the time of Dan William Heyworth abbot¹ [1401-20].

This entry seems to imply that the three altars hallowed about 1345 by the archbishop of Damascus were removed early in the fifteenth century from beneath the arcade and set up in a row against the new *pulpitum*; but there is some question as to their order. John Amundesham uses the word *seriatim*, which would place the altar of our Lady under the enriched reredos to the north, the altar of St. Benet in the place of the rood altar in the middle, and that of St. Thomas and St. Oswin to the south, probably under the arch, so as to leave the aisle free for processions.

But in a preceding description of the altars and monuments in the church brother John notes the burying-places of certain monks 'in the nave within the enclosure there very near to the altar of the Holy Cross'. If therefore the cross altar had been set up against the new *pulpitum* we must place the altar of our Lady in the north aisle against a screen now destroyed, and St. Benet's altar under the reredos; or else regard the latter as merged in the Holy Cross altar.

Other writers have formed different conclusions as to the number and positions of the altars, but so far as this paper is concerned the point is not material.

¹ 'In corpore Ecclesie sunt tria altaria coram Sancta Cruce seriatim situata in honorem Beate Virginis Marie omnium Apostolorum Confessorum Sanctique Benedicti Sancti Thome Martyris et Sancti Oswini que altaria amota fuerunt et ibidem prout cernimus reverenter locata per industriam Domini Thome Houghton quondam Sacriste huius ecclesie qui ob devotionem Sancte Crucis Crucifixum Mariam et Iohannem curiose depingi fecit.

'Et ibidem altare coram ymagine Beate Marie Virginis diligentia et sumptibus Fratris Willelmi Wyntershull Eleemosynarii huius monasterii erectum directum et toto suo tempore honorabiliter sustentatum . . . et consecrata fuere tria altaria sub Cruce prescripta per Horrensem Episcopum regni Hungarie tempore Domini Willelmi Heywurthe Abbatis.' John Amundesham, *Annales Monasterii Sancti Albani* (R. S. 68), i, 448.

The enclosure referred to by brother John may have been a restoration of the latticed iron railing already mentioned.

The only later history of the St. Albans *pulpitum* that need be cited is connected with the organs.

Among the works belonging to the first abbacy of John of Wheathampstead (1420-40) the following are recorded:

Within the quire:

And in making of a pair of organs

£17. 6s. 8d.

And on a certain wooden structure for the placing of the organs and reading of the lessons (beside sums given by the brethren) £43. 3s. 3½d.¹

The abbot's register also says that

he caused to be made a certain pair of organs than which it is thought none could easily be found more beautiful to be seen or sweeter to be heard or more curious in workmanship in any monastery within all this realm.²

That the organs and the reading-desk were set up in the loft of the *pulpitum* seems proved by a curious feature which has been described by the Bucklers and Mr. Neale in their respective works on the abbey church (see fig. 18).

The Bucklers seem to have conceived totally wrong views as to the purpose and construction of the loft, and supposed that it was surmounted by the bed-chamber which was actually built over St. Cuthbert's chapel in the hostry. Access to it, they state,

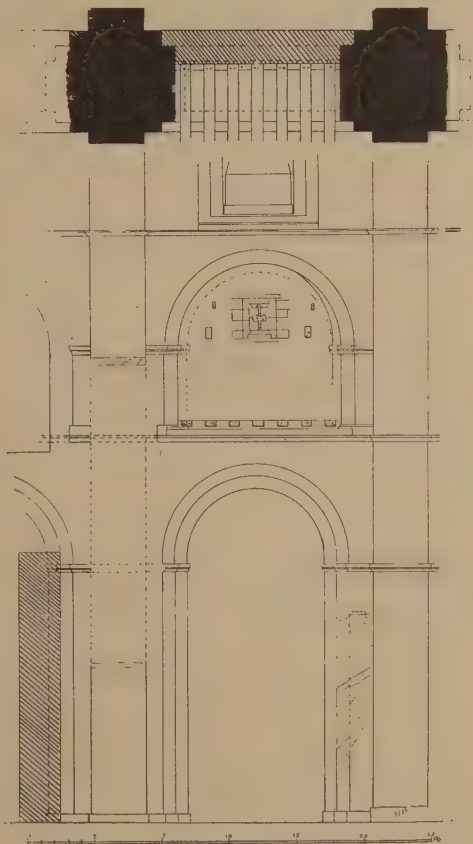


Fig. 18. St. Albans Abbey Church: elevation of unaltered bay of the nave, and plan of the triforium, with former remains of the organ arrangements. (From drawings by James Neale and the brothers Buckler.)

¹ 'Infra chorum

Et in factura unius paris organorum, xvij. li. vi. s. viij. d.

Item in quadam fabrica lignea pro posicione organorum et lectura leccionum preter pecunias a fratribus datas, xliij. li. iij. s. iij. d. ob.' Arundel MS. 34, f. 68 (old numbering).

² 'Fieri fecit quoddam par organorum quo aut visu pulchrius, aut auditu suavius, aut curiosum magis in opere, non putatur posse de facili in aliquo Monasterio infra totum istud regnum reperiri.' Reg. Wheathampstead (R. S. 28. 6), 432.

was gained by means of the staircase in the angle of the South transept, thence along the triforium, and through the arch in the third bay on the South side; and in connexion with this part of the subject it may be observed as curious, that the corresponding arch in the triforium on the opposite side was walled up with masonry in order to cut off all communication with the gallery, the recess being towards the loft, and the wall pierced in the upper part with a narrow cross-loop, which on the inside is splayed to the angles of a square aperture.

The floor of the chamber was 31 feet above the pavement of the church, and laid upon seven joists, each 8 inches in width and 7 in thickness, mortised into a plate of oak which still remains at the back of the recess, as well as another of nearly the same scantling fixed on the outer edge of the sill of the arch of the triforium. Two beams, about 7 feet apart and $8\frac{1}{2}$ feet from the floor, extended across and supported the roof, and over these were moulded cornices, of which fragments remain. The interior width appears to have been 12 feet.¹

A plan of the arrangement and the elevation of the bay are given later.²

Mr. Neale devotes half his plate 28 to an elevation of the same bay, upon which he notes:

This bay is almost in its original condition. The whole of the bays of the Nave and Choir no doubt resembled this.

The Rood Loft extended across the Choir just to the East of the existing Holy Rood Screen opposite this bay. At the back of Triforium Arcade is a longitudinal beam, with two mortices in its vertical face. Into these mortices cross-beams were fixed, which being supported on a beam laid on the South edge of the wall, projected into the Choir to carry the Loft. The angle of the Ground-story pier was probably cut away to make room for the staircase up to the Loft.

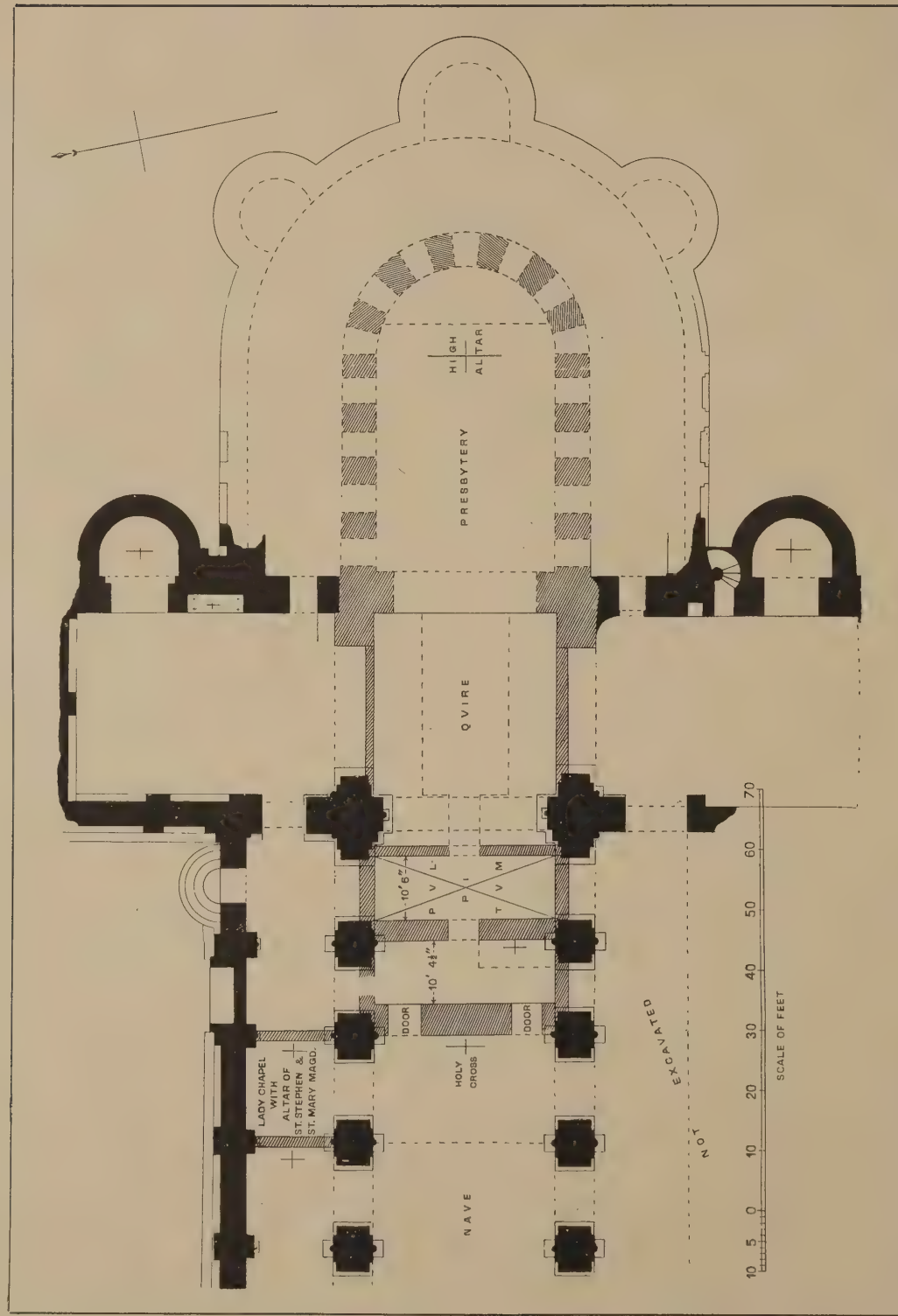
Mr. Neale goes on to suggest that 'perhaps the organs given by John de Whethamstede during his first Abbacy were placed opposite this Triforium bay', and that 'some wooden structure existing here at the end of the fifteenth century influenced the fate of the bay', which, he adds, has 'no window inserted in it, as in the rest of the Triforium Arcade', but 'a thin wall [that with the loop] was built up at the back of the recess when the high-pitched roof was removed'.³

The wall with the loop unhappily went the way of many other precious relics during the destructive works of the nineteenth century: but there is little doubt that the recess of which it formed the back contained part of abbot John's new organs. The rest of the machine must have stood upon the loft. The floor of this was about 15 ft. from the pavement or only half the height up of the

¹ J. C. Buckler and C. A. Buckler, *A History of the Architecture of the Abbey Church of St. Alban, with special reference to the Norman Structure* (London, 1847), 67, 68.

² *Ibid.* facing 141.

³ James Neale, *The Abbey Church of Saint Alban, Hertfordshire* (London, 1877), 25.



ST. AUSTIN'S ABBEY, CANTERBURY: RESTORED PLAN OF THE QUIRE AND THE SCREEN ARRANGEMENTS

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triforium level, and was reached by a vice or stair built up against the pier under its north-west corner, as suggested by Mr. Neale (fig. 18).

The Black Canons' church of Haughmond Abbey in Shropshire, which was rebuilt in the middle of the twelfth century with an aisleless nave, had a quire under the crossing and extending down the nave as far as a thirteenth-century screen wall. This had the cloister entrance just to the west, opening into the retroquire, which was formed by ceiling over the interval to a second screen about 8½ ft. west of the other. Against this second screen was the nave altar on top of a flight of steps. Owing to the considerable rise of the site eastwards there must have been other steps in either end of the retroquire from the rood doors to a platform before the quire entry.¹

We now come to the third type of screen-barrier, that in which a *pulpitum* filling up the bay west of the quire has another screen-wall a bay in front of it, against which the nave altar was placed.

The object of this arrangement seems to have been the interposition of as much space as possible between the nave altar and the quire.

This class is not now represented by any complete standing example, but from remaining component parts and the evidence derived from excavations there is no difficulty in reconstructing the arrangement.

From the earliest recorded example occurring in St. Austin's Abbey at Canterbury this may conveniently be called the St. Austin's type. The quire here was under the great tower, though there were no stalls until 1292, and the *pulpitum* consisted of a thin wall just west of the tower piers and a thicker wall parallel with it a bay to the west with the interval roofed over and closed in by a wall at each end. In this interspace there were probably the stairs to the loft overhead, and in the middle of each cross wall was a doorway leading towards the quire. The next bay formed the retroquire, and had from the first an altar to the south of the quire door. On the west was the thick solid wall of the rood-screen with the rood altar towards the nave and its two flanking doorways. In line with this were screens across the aisles, and that on the north had an altar against it. *Pulpitum* and roodscreen both stood on a platform raised several steps above the nave. There is nothing left to show how the nave altar was fenced or screened, and the foregoing description is based on the evidence of the strong foundations discovered during recent excavations (pl. XIX).

The *pulpitum* with its adjuncts at St. Austin's was the work of abbot Hugh Flori, who in 1091 succeeded Wydo, the abbot who completed the nave. The great rood had been given to the church in 1064 by archbishop Stigand, and is described by Thomas of Elmham as 'crucem magnam argento undique coopertam in navi ecclesie super pulpitum erectam'.

¹ See *The Archaeological Journal*, lxvi, 292-3.

In 1267 Adam Kingsnorth, chamberlain of the abbey, provided the painted decorations of the *pulpitum* ('comparavit picturam pulpiti').

The rood altar is not named until 1224, when abbot Hugh II is stated to have been buried 'in navi ecclesie prope altare sancte Crucis in parte boreali'. In 1498 a Canterbury citizen willed to be buried in the abbey church before the image of the Holy Cross in the nave;¹ and in 1501 a small bequest was left to the light of the Holy Cross where the mass of the Name of Jesus shall be celebrated.² Here we have an interesting parallel to one of the uses of the rood altar at Durham.

An early thirteenth-century MS. with directions as to lights, etc., at St. Austin's mentions those 'super trabem ad pulpitum', and 'super le rebat ubi in precipuis festis ewangelium legitur',³ which may also have been in the *pulpitum*. The same authority also mentions the organs, but without any indication of place.

In the abbey church of St. Peter at Gloucester the quire, as at St. Austin's, was under the tower, and abutted against a wall just west of the tower piers. From this a loft extended to a thick screen between the first pair of pillars, with a doorway in the middle and stairs up to the loft in its southern half. There were walls in line with the front across the aisles. Between the second pair of pillars, as the stonework shows,⁴ was the roodscreen with the nave altar, and the rood-beam above. North of this in front of the barrier-screen in the aisle was a deep chapel, and south of it another of like depth, but less width, with apparently a passage for processions between it and the aisle wall. Under the south end of the retroquire was the tomb of abbot John of Wigmore, who died in 1337 and was buried 'ante salutacionem beate Marie in ingressu chori in parte australi quam ipse construxit cum *pulpito ibidem*, ut nunc cernitur'.

The screens at Gloucester have now been reduced to an organ loft on the site of the *pulpitum*, but the old arrangement can be laid down from the plans published by Browne Willis in 1727, and that by John Carter issued by the Society of Antiquaries eighty years later (fig. 19). Neither shows the roodscreen, but Browne Willis has the flanking chapels, which had probably become pews, and a step across the church just west of them. He likewise shows the *pulpitum* as complete, with an ascent within it of four semicircular steps up to the quire door; also

¹ *Archaeologia Cantiana*, xxxi, 44.

² *Ibid.* 45.

³ *Customary of the Benedictine Monasteries of Saint Augustine, Canterbury, and Saint Peter, Westminster*, edited by Sir E. M. Thompson (Henry Bradshaw Society, 1904).

⁴ The second pair of piers have each a new stone inserted in the sixth course from the top, facing each other, and probably mark the place of the rood-beam. Above this line there is a decided break in the vault, the part to east having but a rudimentary longitudinal rib, while to the west the rib is fully developed. The vaulting corbels are also larger and more elaborate. East of the line, too, the levels of the pillar bases have all been raised.

a shallow enclosure of some kind behind the north chapel. By Carter's time the chapels had gone and the *pulpitum* front wall been replaced by a row of posts carrying the organ loft. But the screens across the aisles were left, and behind the northern one his plan shows a flight of steps which look ancient where Willis shows only an enclosure. These steps suggest that the *pulpitum* loft extended northwards as far as the cloister doorway. By 1807 the steps had also been

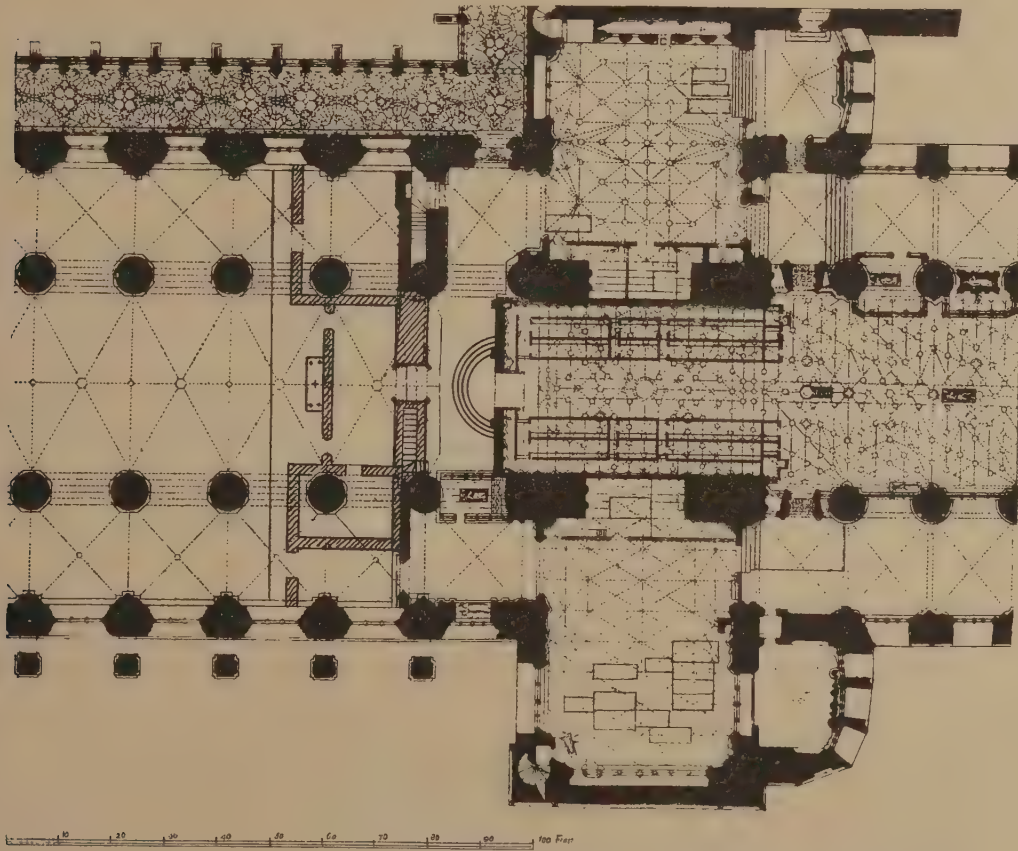


Fig. 19. Gloucester Cathedral Church : plan of the quire screens. (After John Carter and Browne Willis.)

changed, to two before the quire door, and four across the nave, on the old line of the *pulpitum* front. The steps have again been altered in recent years.

In 1273 one of the monks, Adam of Elmley, died and on account of his holy life was buried 'coram altari Sancte Crucis in magna ecclesia ad petitionem populi'. This seems to refer to the rood altar, but the dedications of those north and south of it are at present unknown.

As there are no marks of a fence-screen upon the pillars, the nave altar was probably guarded by a grate or enterclose, as at Durham.

The arrangement at Malmesbury resembled that at St. Austin's and had the quire under the great tower. The stalls abutted westwards against a thin wall with a doorway in the middle: this still exists and is *temp.* king Henry VII as shown by his arms. The bay west was roofed over from the wall to a light stone screen which was continued across the aisles. The middle part of this has gone, but the aisle sections remain, with doorways through them. The two bays in front formed the retroquire, which was enclosed westwards by the roodscreen with the nave altar between the third pair of piers: there were also screens in line across the aisles, with chapels filling the bay before them. The line of the roodscreen is indicated by the little stone closet for the organs that served it, which projects from the triforium on the south side. There must have been a fence-screen of some sort before the nave altar, but as there are no marks of one upon the pillars it was probably an enterclose, as at Durham, with a way past each side to the rood doors.¹

The Arroasian Canons' church of Lilleshall Abbey in Shropshire had a curious arrangement of screens.

The quire here was from the beginning under the crossing and returned on the west against a stone *pulpitum*, 6 ft. 2 in. thick, of the twelfth century. This had been provided for from the first, as well as the stone walls that backed the stalls, and stood at the east end of an aisleless nave which had in the first bay the cloister doorway, and opposite it another into a porch or entry into the north transept. About 1330 a second screen, also of stone, but only 26½ in. thick, was built 23 ft. away from the *pulpitum* in the second bay, perhaps on the site of an earlier screen of wood. It had against its western face, on either side of the middle doorway (which was 5 ft. 8 in. wide), what the Suppression inventory describes as 'in the Body of the Church ij Altars inclosyd wyth oke', and over its line are the holes for the beam and wooden cove of 'the Rodlofte'. At 31½ ft. westwards the rest of the nave was completely cut off by a solid wall 3 ft. thick and of some height, but not bonded into the side walls. Against it is an altar platform of three steps extending right across the nave,² and on the edge of the lowest step was a wooden screen. At the west end of the nave, which was five bays long, was a wide arch into a western tower, also filled by a screen, possibly of stone and not wood. Just east of this screen was the western entrance from the cloister, and in the north-west corner of the nave the doorway to a vice to the upper works.

As the church was purely conventual it is difficult to see what reason there was for building a wall across the nave. The Suppression inventory does not

¹ H. Brakspear in *Archaeologia*, lxiv, 422, 424.

² The uppermost is 7 ft. 4½ in. broad, the next 3 ft. 1½ in., and the lowest 7 ft. 7½ in.

flanking doorways. The bay in front was enclosed as at Ely by screens across the arches on each side and by another between the fifth pair of piers, and had a chapel south of it in the aisle, and under the north arch the chapel and tomb of Sir James Hobart (*ob.* 1516).

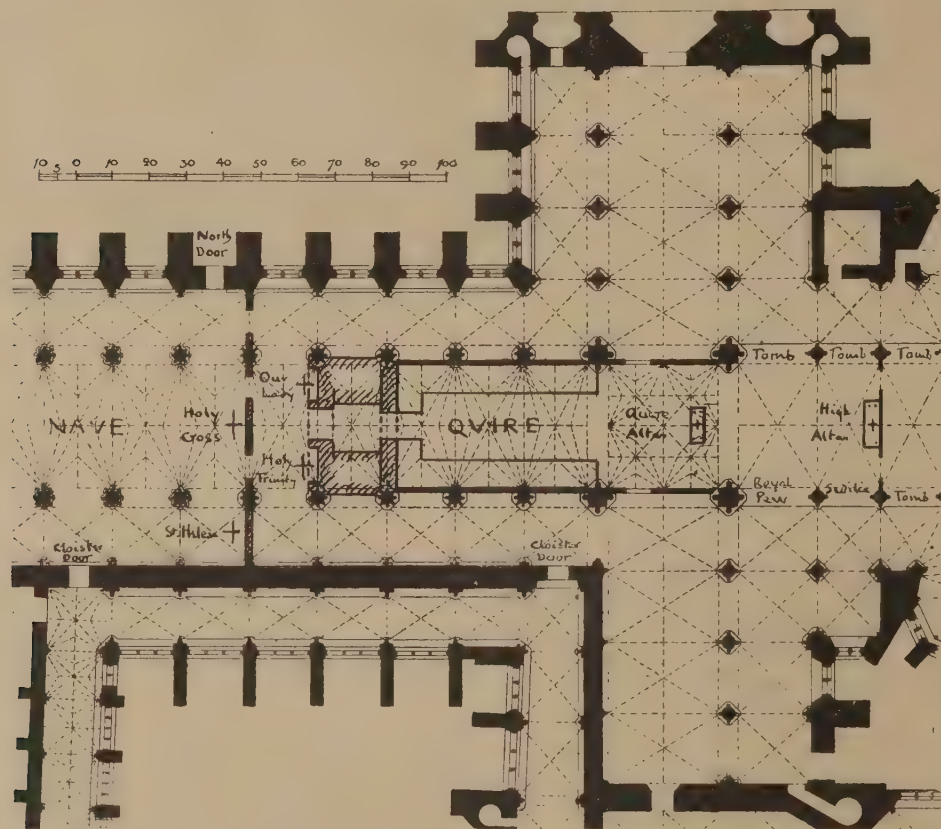


Fig. 21. Westminster Abbey Church: plan showing the probable arrangement of the screens and nave altars.

The nave altar was originally that of the Holy Cross, but by the end of the thirteenth century it had become known as that of St. William. In 1445 bishop Thomas Brouns desired in his will to be buried in the upper part of the nave *prope medium altaris sancti Willelmi*, and left 100 marks *ad faciendum altare ante sepulturam meam et unum Reredos*. Apparently the roodscreen formed the reredos in question.

The *pulpitum* can also be dated by another will, that of bishop Walter Lyhert in 1472:

Sepulturam meam eligo in navi ecclesie mee Cathedralis prope et ante ostium meum novi operis mei vocati a Reredosse prout ibidem pro sepultura mea ordinatum est.

And immediately in front of and under the doorway of the *pulpitum*, between the two altar sites, we found the bishop's grave and coffin in 1899.

Ever since the rebuilding of the abbey church of Westminster in the thirteenth century the quire has filled the first three bays of the nave; the fourth bay was and is filled by the *pulpitum*, and the fifth bay formed the retroquire. This, like Norwich, contained two altars and was enclosed between the fifth pair of piers by the roodscreen with the altar of the Holy Cross and the procession doorways. In line with the roodscreen were other screens across the aisles (fig. 21).

While the quire was in building in 1250-1 Edward of Westminster was ordered to cause '(the *or* a) great cross to be set up in the nave of the church of Westminster and to buy two angels in fashion of cherubim to be placed on either side of that cross'.¹ The purchase of the cherubim only suggests that the rood was an old one removed during the quire works and now set up again.

Certain directions in abbot Richard of Ware's Book of Customs (which was begun in 1266) enable the various altars in the nave to be identified with some degree of certainty. According to this authority the sacrist was bound to keep five lamps burning continually in the church:

- (i) one before the altar of Holy Cross in the nave;
- (ii) another before the altar of the blessed Paul and the image of the Crucified 'to which, for the sake of devotion and to pray, and to kiss the feet of it, people were wont to go up by steps on one side and go down on the other';
- (iii) a third before (*ante*) the old altar of our Lady;
- (iv) a fourth before (*coram*) the altar of the Holy Trinity;
- (v) the fifth before (*coram*) the altar of St. Benet.

The place of the altar of the Holy Cross has already been noted. The altar of St. Paul, I think, as does Mr. Lethaby, was on the *pulpitum* itself, and since there was no difficulty about two stairs to the loft, the crucifix which was venerated by the people was probably that set up in it by Edward of Westminster. The altars of our Lady and the Holy Trinity² would be those in the

¹ 1250-1. 'Mandatum est Edwardo de Westmonasterio sicut Rex alias mandavit quod... mangnam [*sic*] eciam crucem collocari faciat in Navi ecclesie Westmonasterii et emat duos Angelos in modum Cherubyn ex utraque parte illius crucis collocandos. Teste, etc. iiij die Februarii.' Close Roll, 35 Henry III, m. 19. [I am much indebted to Mr. M. S. Giuseppi, F.S.A., for this extract.]

² Dean Robinson has called attention to a curious passage in the Customs as to the visit of the *minuti* (or monks who had been let blood) to the altar of the Holy Trinity. This can be explained quite satisfactorily if the retroquire were used by the *minuti* in the same manner as the Cistercians when *extra chorum*. *Archaeologia*, lxii, 90, 91.

retroquire, and the former is called old because a new Lady chapel and its altar had been set up elsewhere since 1220. The fifth altar for which the sacrist had to find a light, that of St. Benet, may have been that in the aisle south of the Cross altar which was later called St. Helen's. There does not seem to have been any altar against the wall crossing the north aisle, because it was so close to the north doorway of the nave; and it was probably pierced by a doorway corresponding to the 'trellisdoure' at Durham.

The churches of the White Monks formed a class quite separate from those of the Black Monks and Canons, on account of the peculiar way in which they were used. The eastern part contained the quire, etc., of the monks; the part west of the cross screens in the nave formed the quire of the lay brothers; and if the church had aisles, both quires were shut off from them by continuous screen-walls in front of the pillars, against which the stalls were placed. For the public or outsiders there was no room whatever in a church of this sort.

Some of the finest of our ruined abbey churches belonged to the Cistercians, and although the screens have been pulled down in every one, their foundations, or remains uncovered by excavation, or the cuts and holes for them in pillar or wall, enable their arrangements to be made out with some certainty.

Owing to the characteristic short presbytery of the earlier Cistercian churches the monks' quire was under the crossing, and often extended into one or two bays of the nave; and, except at Rievaulx, with its long eastern limb of later date, there is no English church in which the quire was east of the crossing.

The monks' quire was bounded westward by a wall. This was generally either quite thin and perhaps in some cases a wooden partition, or it was a mass of masonry from 5 to 7 ft. thick with the quire door in the middle and stairs in its thickness to a loft above, as formerly at Tintern.

In the latter case it formed the *pulpitum*, and had two altars against it, at Dore, Valle Crucis, and Strata Florida, and perhaps at Tintern, Waverley, and Calder. At Jervaulx the altars stood upon platforms and were enclosed by screens, which was probably the normal arrangement; the bay to the west was no doubt screened off to form the retroquire.

When a thin wall bounded the quire it always had another and thicker one of masonry a bay west of it,¹ and the intervening space served as the retroquire and was ceiled over to form the loft of the *pulpitum*.

At Kirkstall, Furness, Bindon, Roche, Revesby, and in probably almost every other example of this compound screen, it had against its western front a pair of enclosed platforms with altars, and at Furness and at Fountains there were others in the aisles as well, forming thus a row of four. Jervaulx seems

¹ At Hayles, a late example, the walls were only 6 ft. apart.

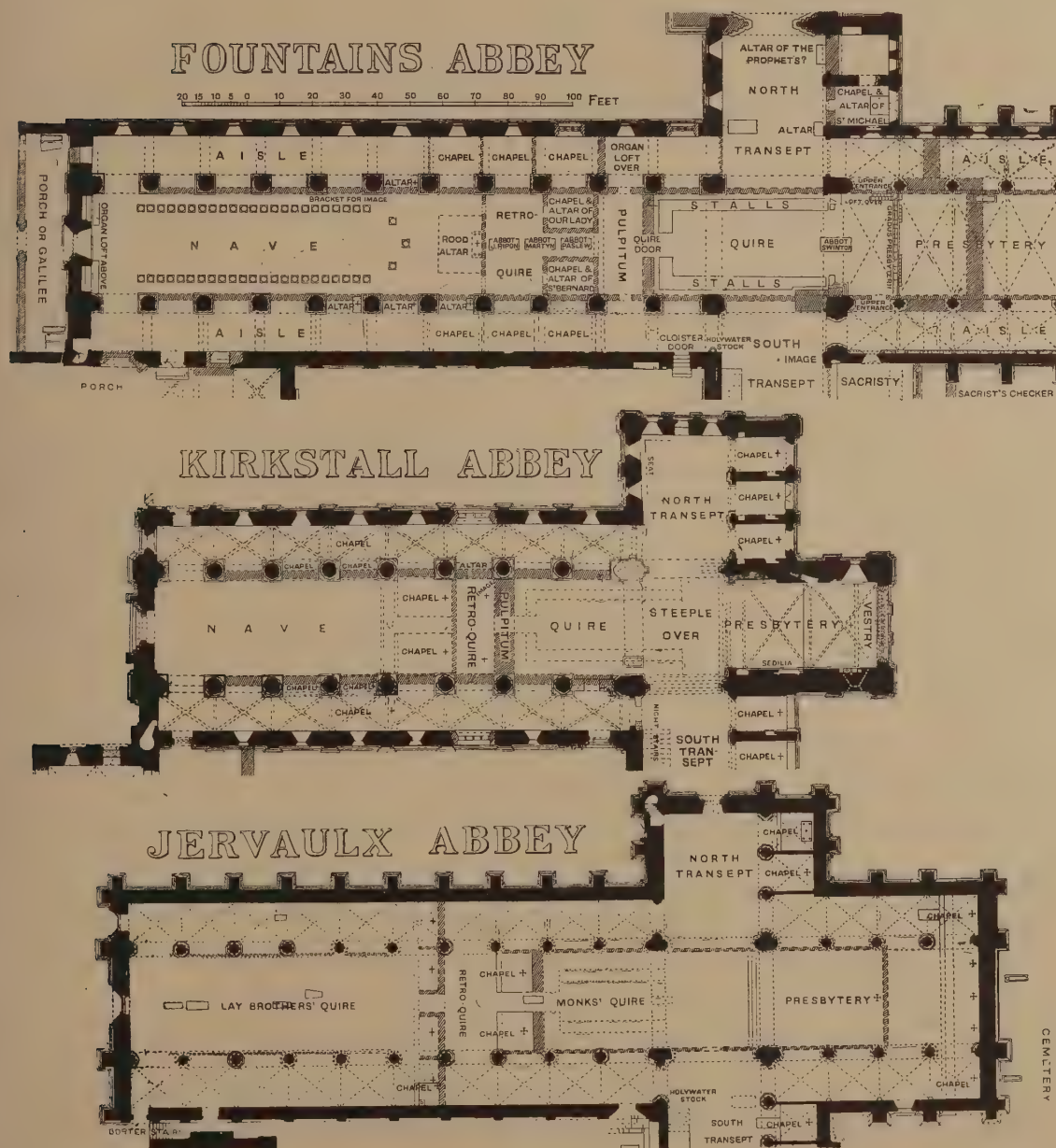


Fig. 22. Plans showing the arrangements of screens in the Cistercian churches of Fountains, Kirkstall, and Jervaulx.

also to have had a like row of four altars, but it is not clear that they were part of the original arrangement¹ (fig. 22).

The retroquire of a Cistercian church was an important feature, since it was not only the place where the old and infirm monks could sit to hear the services, but for those who had been blooded and were released temporarily from full attendance in quire. When therefore the *pulpitum* was a simple one, another screen-wall stood west of the altars to enclose the retroquire. At Clairvaux in 1517 the retroquire held thirty-four seats for those who used it, and on the west face of the screen-wall was an altar of the Trinity with the great rood above it. A like arrangement certainly existed at Fountains, and the base of the roodscreen and its altar was found by Mr. Roland Paul at Abbey Dore; but without further evidence it is not safe to say that only one altar was the rule. As a matter of fact there do not seem to have been any lay brothers after the Great Pestilence of 1349 in any English house of White Monks, and their quires were accordingly cleared away. At Fountains the nave seems henceforth to have been used only for processions, and there still remain under the turf the parallel rows of square white stones upon which the monks and novices stood during the station before the rood in the Sunday procession.²

At Fountains, Buildwas, and Tintern, and apparently Furness, there is evidence that a pair of organs stood upon the loft of the *pulpitum*. Both Fountains and Buildwas seem also to have had a second pair of organs in a western gallery, and at Meaux it is definitely recorded that in 1396 there were *organa maiora in occidentali fine ecclesie* as well as *organa minora in choro*.

It is not possible in the limits of this paper to describe every monastic *pulpitum* or roodscreen which is left to us, or for which there is architectural or documentary evidence, but only those that illustrate the various points raised. This I hope has already been done. There remains however one important question: that of use.

It has hitherto been assumed by most writers on the subject, including myself, that the *pulpitum* of a monastic church was used in the same way by monks and regular canons as the *pulpitum* at Salisbury or Lincoln was by the canons secular of those churches. But this view is not borne out by the documentary evidence available, and it is also curious that no monastic *pulpitum* seems to have had arched recesses for altars in front like those at Southwell, Exeter, and Tattershall, which are apparently directly descended from the altar spaces under the Italian ambons. The way up to the loft of a monastic *pulpitum*

¹ The Suppression inventory of Dieulacresse Abbey in Staffordshire has 'iiij. alters of alebaster in the bodey of the churche; the crusifyxe; xij candlestyks of latenn before the same; j particion of tymber in the body of the churche'. *Archaeologia*, xliii, 215.

² See plan in *The Yorkshire Archaeological Journal*, vol. xv.

was also usually by a circular vice, as at Ely and St. Albans and Hexham, and probably Tewkesbury, though straight flights of steps also occur, as at Tintern and Gloucester. But the narrow vice is against any use of the *pulpitum* involving a procession with taperers, etc., for the Gospel as at Salisbury.

The Constitutions addressed by archbishop Lanfranc to his prior Henry at Canterbury contain no directions as to the reading of the Gospel or of the genealogy, or anything else from the *pulpitum*, and the *pulpitum* itself is not even mentioned. The ancient customs of the Cluniac monks are equally silent. The White Monks, even on feasts of twelve lessons, read the Gospel from a desk at the altar, and apparently did not use the *pulpitum* for any ceremonial purpose. The Black Canons, at any rate at Barnwell, read the lessons at mattins daily from the *pulpitum*, and the White Canons read the genealogy from it on Christmas Day.

On the other hand, there is evidence to show that the monastic orders, instead of reading the Gospel from the *pulpitum*, used a gospel desk standing at or near the north end of the high altar.

An eagle desk is so shown in the drawing of the Westminster presbytery made for abbot Islip's obituary roll, and it is described in the Suppression inventory as 'a fair lecturne of latten be the high altar'. The corresponding Ely inventory also has 'to the high altar a standyng lecture of laten with an egle'. Colne Priory in Essex had in the quire in 1536 'an egle of latten desk fashion for to redd the gospel at', and Osney Abbey near Oxford had 'j dext of brasse with a Egle in the quire'. The priory of Holy Trinity at Ipswich in 1536 likewise had in the quire 'a deske of latten to rede the gospell at, praysed at 20s.',¹ and Ixworth Priory (Suffolk) had 'in the Church at the high Altar a lecturne of latten praysed at x^s.'² At Christchurch, Canterbury, prior Thomas Goldston II, 1494-5-1517, 'Analogium quoque sive aquilam eneam proprijs impensis procurari fecit'. It is entered in the inventory of 1563 as a 'lectron of latten wth a picture of an egle' and was probably the gospel desk, since there was also 'a lectron and four stoles of Iern for the rectors of y^e quier'.³

So far I have not come across any instance of an eagle desk by the altar of a secular church.

It must not however be assumed that these eagle desks were always used for the reading of the Gospel. William More, prior of Worcester from 1518 to 1535, on one of his visits to London brought thence in 1522

Item bow3ht at london ij grete dextes wyth ij egulls on to be in y^e quyur, the other to y^e hye Awter to rede y^e gospell apon with iiij candilstycks, for which he paid £15 13s. 3d.⁴

¹ *Suffolk Inst. of Archaeology*, viii, 9.

² *Ibid.* 27.

³ Legg and Hope, 123, 176, 229.

⁴ John Noake, *The Monastery and Cathedral of Worcester* (London, 1866), 167, and *Journal of Prior William More* (Worcester Historical Society, 1914), 153.

At Durham, too, *Rites* tell us that :

At the north end of the high altar, there was a goodly fine letteron of brasse where they sung the epistle and the gospell, with a gilt pelican on the height of it. . . . Also ther was lowe downe in the quere another Lettorn of brasse (not so curiously wroughte) standing in the midst against the stalls . . . with an eagle on the height of it, and hir winges spread a broad wheron the monkes did lay theire bookes when they sung theire legends, at mattens or at other times of service.¹

The Durham gospel pelican was an unusual form of desk, but it is paralleled by another which happily exists in the cathedral church of Norwich and is used now to read the lessons from.

Many of the monastic inventories describe not only the eagle desk, but the organs also as being 'in the quire'. What this precisely means is somewhat uncertain. At Leighs Priory in Essex in 1536 they had 'a payre of orgaynes over the quyre'. This may mean in the *pulpitum*, but other places were available, as the following description of the organs in the quire at Durham shows :

There was 3 paire of organs belonginge to the said quire for maintenance of gods service, and the better selebratinge therof one of the fairest paire of the 3 did stand over the quire dore only opened and playd uppon at principall feastes, the pipes beinge all of most fine wood, and workmanshipp verye faire partly gilted uppon the inside and the outside of the leaves and covers up to the topp with branches and flowers finely gilted with the name of Jesus gilted with gold . . . also there was a letterne of wood like unto a pulpit standinge and adjoyninge to the wood organs over the quire dore, where they had wont to singe the 9 lessons in the old time on principall dayes standinge with theire faces towards the [9 altars altered to] high altar.

The seconde paire stood on the north side of the quire beinge never playd uppon but when the 4 doctors of the church was read, viz. Augustine Ambrose Gregorye and Jerome beinge a faire paire of large organs called the cryers.

The third was dayly used at ordinary service.²

From another and later source we learn that :

The third pair of Organs were called the White Organs, they were placed on the South side of the Quire towards the Vestry house, and were most, and indeed dayly, used at ordinary service, in the times of Queen Elisabeth and K. James I.³

Other churches, Ely for example, had likewise more than one pair of organs in the quire, and the priory of St. Osyth in Essex had 'a grete payr and a lytle pare of organs in the Rodeloft'. The description in *Rites* therefore shows how they may have been used; it also suggests that the Durham *pulpitum* was an organ loft which was sometimes also used for ceremonial purposes.

There is evidence that the monastic *pulpitum*, like the collegiate instances

¹ *Rites of Durham* (op. cit.), 13, 14.

² *Ibid.* 16, 207, 208.

³ *Ibid.* 162, 299, 300.

already noted, sometimes contained an altar, as it undoubtedly did at Peterborough in 1540.

Only a few words can be said as to the screen arrangements of the Black and White Nuns, and of the four orders of Friars.

So far as the available evidence goes there was little difference between their types of screens and those already described.

Most nuns' churches were under the same roof as, or attached to, parish churches, and although generally much smaller, had screen divisions similar to those of monks and canons in like case.

The Suppression surveys of twelve small Yorkshire priories,¹ of which all but one were houses of nuns, afford a few interesting details.

In five churches of Black Nuns, besides the high altar, Thicket had 'ij in the quyre and one benethe'; Wilberfoss had 'ij alters in the quere and one benethe', and the parish church was 'adjoyninge to the same at the nether ende'; Yedingham had 'the hygh alter, and one alter in the quere, and ij in the churche'; Arthington, a Cluniac house, had 'a roode lofte of tymbre', but only the high altar is named; Nunkeeling had 'a hye alter, ij alters in the quere, and one in body of the churche', and it is expressly noted that 'it stondith at the nether end of the parish churche of Nonnekelynge, and the walles and the roofe are alle hole of one story . . . and there are ij doorys by the hygh alter for to go and come into the parish churche'.

In six churches of White Nuns, Handale had 'a high alter, ij alters in the quyer, and one benethe in the quere'; Esholt had 'a roode lofte bytwene the quere and the chauncell', but only the high altar is named; Wykeham had, besides the high altar, 'iij alters in the quyer, and ij in the body of the churche'; Basedale had a 'high alter, ij alters in the quere, and one benethe'; Swine, which was the nave of a parish church, had 'one alter in the quere, and ij alters benethe in the body of the churche'; Kirklees had a 'high alter, ij alters in the quere, and ij benethe'.

The twelfth church, Grosmont, was that of a house of Grandmontines, and had a 'high alter, and ij alters in the body of [the] churche'.

It will be seen that in nine churches there were, besides the high altar, one, two, and in a single instance three, altars in the quire, but no hint is given as to their position.

The two altars in the naves of four churches probably stood against a *pulpitum*, with the quire entry between them; the single nave altar in five churches apparently stood against a second screen or roodloft, with the usual flanking doors.

¹ These have been printed by Mr. William Brown, F.S.A., in *The Yorkshire Archaeological Journal*, ix, 197-215, 321-33.

All the buildings concerned have unhappily been destroyed, or 'restored' out of recognition, so nothing but some future excavation can carry the matter any farther at present.

Friars' churches seem usually to have had two cross walls between quire and nave, carried up to support a belfry or steeple like that of the Grey Friars at Richmond, the Grey Friars at Lynn, the Black Friars at Norwich; or in the churches of the Charterhouses of London and Mount Grace.

The area beneath the steeple was entered directly from the cloister, and had the quire door under an eastern arch, and another door westwards into the nave, where it was flanked by two altars.¹

It has not of course been possible in the foregoing paper to deal with the transverse screens of several important churches, on account of the difficulty in deciding to which group they belonged. It may be easy enough to locate the *pulpitum*, but to discuss its character and the arrangements westwards of it cannot be done when the screens have been destroyed and any marks of them effaced.

Thus at Tewkesbury, where the quire filled the crossing and the first bay of the nave, the *pulpitum* may have been (i) a solid screen, or (ii) a loft filling the next bay like St. Albans. This latter alternative seems the more probable, because another screen wall, with the nave altar against it, certainly stood between the second pair of piers and had other screens in line with it across the aisles. Behind the pillars are plain traces of the winding stairs against them that led up to the roodloft, and the whole arrangement stood upon an existing step or platform which crosses the church in the third bay.

At Bury St. Edmunds there is definite record that, following upon the rebuilding of the nave, Dan Hugh the sacrist, who came into office about 1180,

Pulpitum in ecclesia aedificavit, magna cruce erecta, cum imaginibus beatae Mariae et S. Iohannis sibi allaterantibus,²

but nothing is known about the nave altar or any others west of the *pulpitum*. The fact that the retroquire was beneath it (see *ante*, p. 70) suggests that the arrangement followed either the Ely or the St. Austin's type.

At Worcester, despite the great extension of the church eastwards in the second quarter of the thirteenth century, the quire kept its original place under the crossing and in the first bay of the nave until after the Suppression.

¹ In 1509 Thomas Pickering of Yorkshire willed to be buried in the Grey Friars within Newgate at London, 'in the ambulatory before the choer'. *North Country Wills* (Surtees Soc. 116), i, 82.

The Suppression inventory of the White Friars' church at Newcastle-on-Tyne has: 'Item the parclose overwhart the church and also all the parclose aboutes the roode chapell', which suggests a double screen or *pulpitum* at the quire entry of the Ely type. *Archaeologia*, li, 71.

² M. R. James, *On the Abbey of St. Edmund at Bury* (Cambridge, 1895), 153.

Differences in the levels of the pier-plinths suggest that the second bay was filled by the *pulpitum*, and that the third pair of piers had the roodloft between them with a step west of it. All the old arrangements were destroyed in 1550, when the quire was moved eastward of the tower, but a record of new quire-stalls in 1379, following the vaulting of the crossing in 1376, and the making of a new *pulpitum* in 1381, gives a probable date for the earlier arrangement.¹

At Peterborough the stalls probably occupied at first the space under the crossing and the first bay of the nave, returning against a *pulpitum* set up during the last quarter of the twelfth century by abbot Benet. New stalls, perhaps the first of a permanent character, were set up in the time of abbot Walter, 1233-45, who gave 10 marks towards the cost and much of the timber. Leland records that in the days of abbot Robert Kirton, 1496-1528,

He set up in the Church the *Crucifixorium* or Rood-loft, now standing at the entrance of the Quire, though placed something lower than it was at its first erection.

This remark may point to a removal of the *pulpitum* from the first to the second pair of pillars, thus adding a bay to the quire. Browne Willis shows a thin screen on this line, with a thick wall across the south aisle. Between the third pair of pillars, as the marks of it show, was another cross screen, and probably the third bay was ceiled over as at Ely. The Suppression inventory mentions the roodloft and an altar that was in it, and 'an altar' in the body of the church, which may have been the nave altar.

At St. Bartholomew's Priory in Smithfield the quire, at the Suppression, was under the crossing and in the first bay of the nave; it abutted against a thirteenth-century *pulpitum* which evidently filled the second bay, since the existing east wall has corbels on its western face for the floor of the loft.² But all beyond has been destroyed.

In conclusion it may be pointed out that, although the difference between the secular and monastic transverse screen systems continued throughout, as soon as

¹ I am indebted to Mr. Harold Brakspear for the following extracts from the *Edificiorum Chronologia* relating to these works:

'Anno domini mcccclxxvj Hoc anno sacrista qui supra voltam supra chorum sub novo campanili et voltam et fenestras super altare sancti Thome fecit de novo.

'Anno domini mcccclxxix Hoc anno cellerarius supradictus (Wm. Power) domum rasture in infirmaria edificavit. Eodem anno sacrista supradictus (John Lyndsey) nova stalla in choro erexit. Aream chori ac capellarum sanctorum Thome et Magdalene pavementum ut modo cernitur persternavit.

'Anno domini mcccclxxxj sacrista supradictus clausuram fecit circa capellam beate virginis iuxta rubeum hostium ipsum hostium amovendo, et novum ibi ponendo. Ac novum pulpitum ante chorum apposuit in quo nocte sancti Thome apostoli primitus legebatur. Nam fere per xxv annos lecciones in choro inferius erant lecte.'

² See *Archaeologia*, lxiv, plate iii and p. 166. Recent discoveries of a small window and a doorway at the triforium level above the line of the existing *pulpitum* wall seem to show that at one time the *pulpitum* filled the first and not the second bay.

the quires were moved eastwards of the crossing a common form of *pulpitum* came into fashion. The early type, with arched recesses for altars, as at Exeter and Southwell and Chichester, continued purely secular; that with its western face covered with housings for images is to be found not only in secular churches like Salisbury, Lincoln, Wells, York, and Ripon, but in canons' churches like Christchurch Twynham and monastic churches like Durham and Christchurch at Canterbury. Screens of the Ely and St. Albans type, which formed the western barrier of the quire, seem also to have been decorated with imagery, but in the other types the *pulpitum* face was more or less plain, owing to its being masked by the other screens west of it.

PS. Since this paper was written Mr. A. Hamilton Thompson, who has also most obligingly looked through it in proof and suggested several valuable corrections, has kindly favoured me with two interesting items from episcopal visitations that bear on the use and arrangement of screens.

The first concerns Thomas More, dean of the collegiate church of Irthlingborough in 1442:

Item quod ipse decanus sit senio confractus et non possit subire onera sibi incumbencia, petit igitur in sui relevamen . . . quod ebdomodarius observet pulpitum dominicis diebus, dicendo preces communes et exequendo alia ibidem exequenda.¹

It has already been noted above that Irthlingborough apparently had a screen like that at Manchester which served as the collegiate *pulpitum* and the parish roodscreen, and this entry seems to point to such a use.

The other entry is found in a visitation of the Black Canons' priory of Laund in Leicestershire, in 1440:

Frater Iohannes Leche . . . dicit quod mulieres habent nimium accessum in ecclesiam canonicorum intra clausuram et tanto approximant ostio chori quod canonici non possunt exire nisi respiciendo ultum ad ultum. Petit igitur ut decetero non intrent clausuram illam sed audiant missas in navi ecclesie extra clausuram.²

On this is founded the following injunction:

Item quod decetero mulieres alique deprope morantes non ingrediantur clausuram inter navem et superiorem partem sive chorum ecclesie ad missas audiendas sed ita provideatur ut missas huiusmodi audiant in navi antedicta.³

Who the intrusive ladies were it is not easy to suggest, since the priory church of Laund was wholly conventual, and the parish church was some distance away. But the quire was evidently bounded westwards by a double or compound arrangement of screens constituting the *clausura*, from whence the ladies were henceforth to be shut out; there was also a nave altar outside the *clausura* at which they could hear mass.

¹ Alnwick Visitation MS., f. 7.

² *Ibid.* f. 97.

³ *Ibid.* f. 98 d.

V.—*The Sarum Consuetudinary and its relation to the Cathedral Church of Old Sarum.* By SIR WILLIAM ST. JOHN HOPE, *Litt.D., D.C.L.*

Read 10th May 1917.

THE suspension owing to the continuance of the Great War of all work upon the hill of Old Sarum, and the consequent lack of material for the usual report thereon, afford a useful opportunity for the discussion of certain points connected with the cathedral church of Sarum.

It will be remembered that the plan of this was fully disclosed for the first time by the excavations of 1912-13,¹ and it thus became possible, also for the first time, to discuss the arrangements of the building as enlarged by bishop Roger early in the twelfth century, as well as those of the church completed and hallowed by bishop Osmund in 1092.

The value and importance in the history of church building of the plans then revealed were referred to in our report, but have not yet been fully appreciated. There was, however, another point which could not then be dealt with conveniently, the information as to the furniture, ornaments, and ritual uses of the church which can be gleaned from contemporary documents.

Foremost of these is the charter of bishop Osmund, dated in the year 1091,² notifying to all men that, in honour of our Lord Jesus Christ and of the most holy Virgin Mary, he has built his church of Sarum and instituted canons in it and granted to them various endowments, including the church of Sarum with its tithes and all other appendages, and 2½ hides in the same vill.

The second document, that known as the *Institutio Osmundi*,³ is a recital, of the same date, of the dignities and customs which bishop Osmund had instituted in the church of Sarum, namely a dean, a chanter or precentor, a chancellor, and a treasurer; archdeacons, of whom there were four; and an undefined number of canons, two of whom were to be subdean and subchanter or succentor respectively. The document also defines carefully the duties of the canons and their officers.

¹ *Proc.* xxv, 93-97, and xxvi, 100-117.

² W. H. Frere, *The Use of Sarum* (Cambridge, 1898), i, 257.

³ *Ibid.* 259.

For all these people, to whom have to be added the vicars, clerks, and choristers, a quire of some size was necessary. This must have occupied the space under the crossing and extended some way down the nave of Osmund's church, but the recent excavations did not disclose any traces of its arrangements, which had evidently been obliterated by later changes.

The next document to be noticed is a list of the ornaments and jewels which Osmund gave to his church,¹ including shrines, texts, and pixes, crosses, candlesticks, and chalices, curtains, carpets, altar-cloths, and vestments. Of these it is only necessary to refer to the last item, of which there were thirty-four copes, twenty chasubles, thirteen dalmatics, thirteen stoles, seventeen fanons, forty albes and as many amices, and eleven tunicles. There were also seven chalices and patens of silver-gilt, and a chalice of gold. These seven chalices and patens probably correspond to the number of altars, of which there were certainly five in the eastern part of the church and not unlikely two more in the nave.

But the most important document of all is the well-known Consuetudinary of the church of Sarum. This has been printed more than once, but the only critical text is that edited by the Rev. Walter H. Frere, D.D., and published by him in 1898.²

This document has been quoted and appealed to by a large number of writers, but I am not aware that it has been discussed from one very important point of view, namely that it refers, *not* to the cathedral church of Salisbury, but to the church of St. Osmund as enlarged by bishop Roger, whose ground plan we have uncovered at Old Sarum.

As Dr. Frere points out, the Consuetudinary is clearly not the work of St. Osmund, but is a later 'explanation' of his *Institutio*, which has been carefully incorporated in it.³

The earliest existing text is not later than the first half of the thirteenth century, but as Dr. Frere says:

Internal evidence will enable us to fix the date more precisely as subsequent to 1173 but anterior to 1220, for the Consuetudinary in its original form has the Martyrdom but no mention of the Translation of S. Thomas of Canterbury, though that event made such an impression at Salisbury, at any rate on the chronicler of the Sarum doings of the day, that he goes out of his way to mention it.⁴

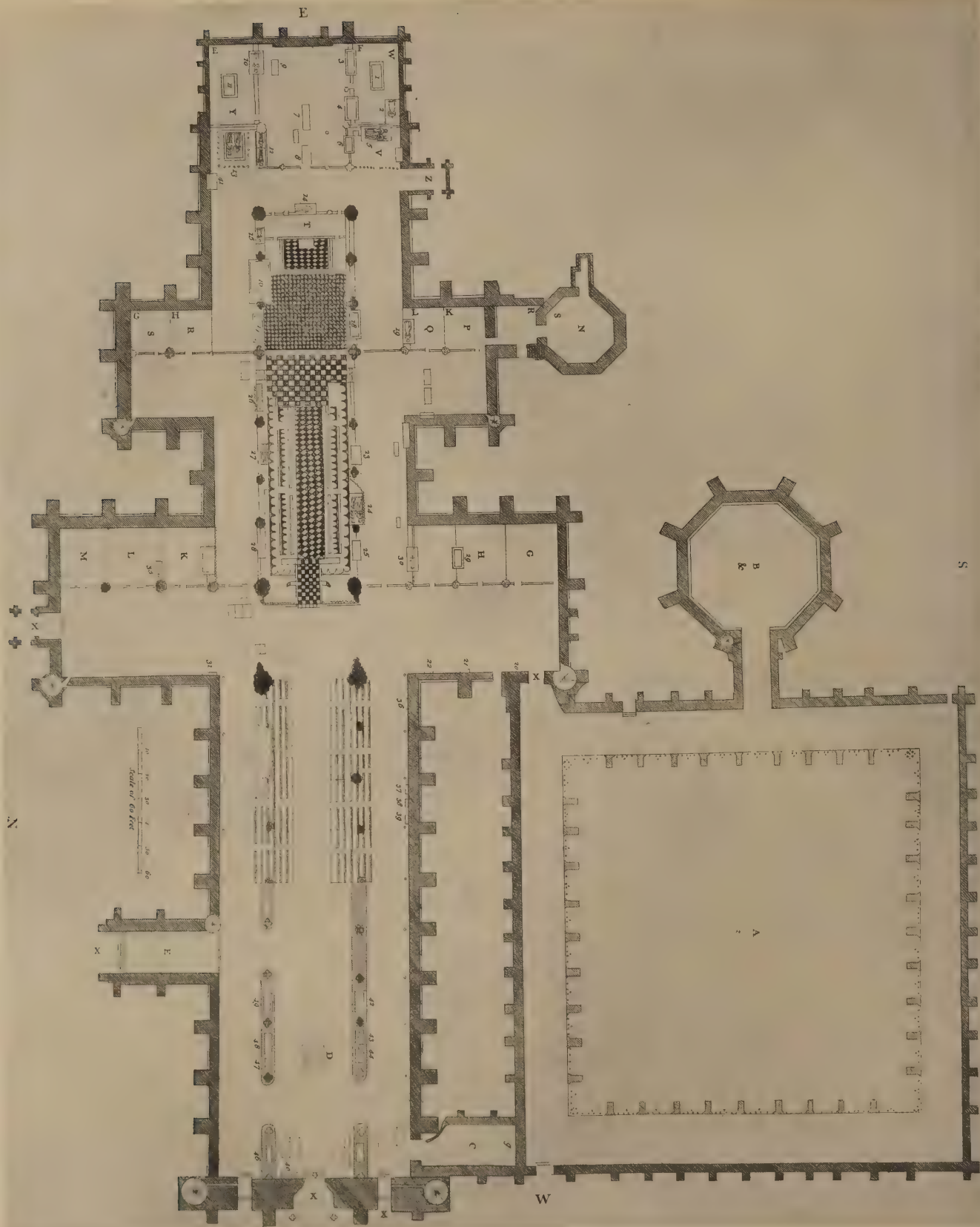
Dr. Frere further suggests that the Consuetudinary was possibly also anterior to 1214, since the *Nova constitucio* was made then and clearly represents a subsequent stage of legislation. For these and other reasons he concludes that

¹ Chr. Wordsworth, *Ceremonies and Processions of the cathedral church of Salisbury* (Cambridge, 1901), 183.

² *Op. cit.* i, 1-258.

³ i, xvii.

⁴ i, xix.



PLAN OF THE CATHEDRAL CHURCH OF SALISBURY BEFORE WYATT'S ALTERATIONS

Reduced from Gough's *Sepulchral Monuments*

Published by the Society of Antiquaries of London, 1917

The Consuetudinary therefore as a whole in its original form seems to date from c. 1210 and to be the closing work of Richard Poore as Dean rather than his early work as Bishop.¹

Since the foundation stones of the new cathedral church at Salisbury were not laid until 1220, and its three eastern altars, those first set up, were not hallowed until 1225, we may proceed without further hesitation to examine how far a Consuetudinary which may approximately be dated 1210 will illustrate the arrangements of a church that was in being then and for nearly twenty years after, and for use in which it must have been drawn up, in other words the cathedral church of Old Sarum.

It will perhaps clear the ground at the outset to describe and compare the plans of the Salisbury and Sarum churches.

The Salisbury church (plate XX) consists of an eastern limb traversed betwixt quire and presbytery by a transept with eastern aisle, and having to the east a transverse procession way and a Trinity chapel of three bays. The quire occupies four bays, and the presbytery three bays, and there are north and south aisles of nine bays overlapping the ambulatory and the Trinity chapel eastwards. West of the quire is the tower, and north and south of it the greater transepts with eastern aisles. Beyond the tower are the nave and its aisles, each of ten bays.²

The most important features to be noted are the doorways. At the west end of the nave is the great double doorway with its shallow porch, and right and left of it lesser doorways into the aisles. About midway down the north side of the nave is another wide doorway, approached through a long porch of two bays, and forming the principal entrance into the church from the city. The north transept once had a small doorway and porch in the north gable, since destroyed by Wyatt, and there was a similar doorway and porch towards the bishop's palace at the south end of the procession way, also destroyed by Wyatt. There is an entrance from the aisle of the south-east transept into the octagonal vestry south of it; and in the west wall of the great south transept are two other doorways: one from the cloister, the other into the yard or court betwixt church and cloister. Lastly, there is another doorway into the cloister at the west end of the south aisle.

The Sarum church was only two-thirds the length of its successor at Salisbury (plate XXI). In 1210 it had a square-ended presbytery of three bays with north and south aisles, and a transverse ambulatory or procession path beyond, with a large eastern chapel, between two others in continuation of the aisles. The

¹ i, xx.

² The plan shown in pl. XX is reduced from that in Gough's *Sepulchral Monuments* (London, 1796), vol. ii, p. cccxxix, pl. xxxix. It was made before Wyatt's destructive operations.

quire was under the tower, which was flanked north and south by transepts of three bays, with eastern and western aisles. The eastern aisles, like the eastern transept at Salisbury, were joined on plan by a narrow bay betwixt quire and presbytery, and the western aisles in the same way united in a narrow bay west of the tower. The nave, which was of seven bays with north and south aisles, was that of St. Osmund's church, but had a western adjunct or galilee of later date. There were probably three western doorways into the church, as at Salisbury, but the chief entrance was in the south transept through a porch. There was also another but lesser doorway on the south side half-way down the nave.

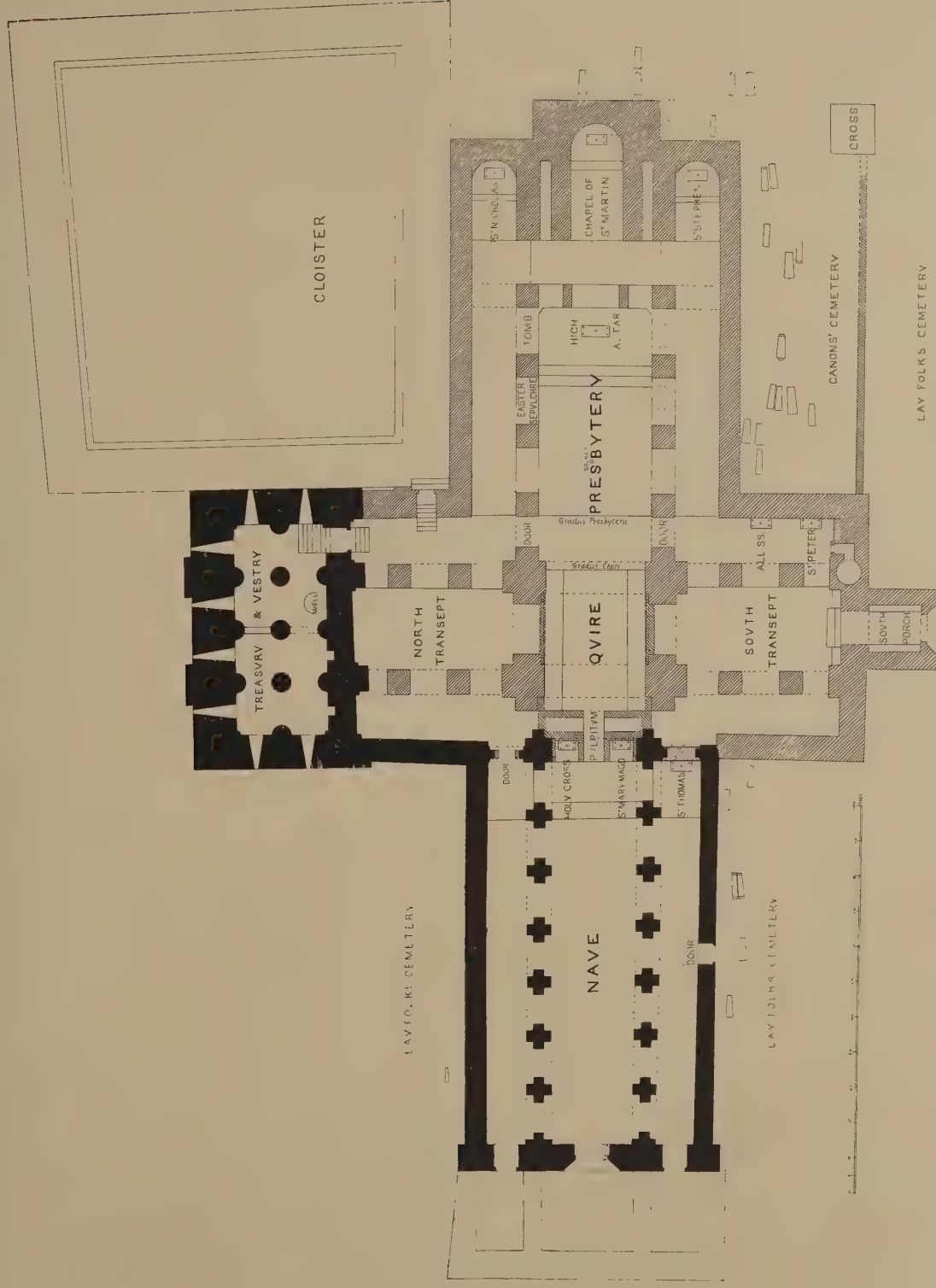
In the north transept were three doorways. The first was in the east wall, at the lower end of a broad flight of steps up to the church from a large four-sided cloister that lay north of and overlapped the presbytery. The second doorway was in the north end of the eastern aisle, at the head of another broad flight of steps leading down to the vestry and treasury. These important rooms were disposed in a vaulted undercroft of four bays, with a middle row of stout pillars, and lighted by narrow windows on the north side and at the ends; it also contained a large well. Over this subvault was apparently the chapter-house, which must have been entered by a third doorway from the transept, either in the middle of its length or toward the west end.

To the south of the church, and also on the north, where it extended up to the city wall, was the cemetery of the lay-folk, and to the south of the presbytery was a narrow court forming the cemetery of the canons, as shown by the fine series of tombs in it. It seems to have had a cross on steps near its south-east corner.

It will be seen on comparing plans that at Salisbury both cloister and vestry are on the south, but at Old Sarum on the north; and that while the chief entrance at Salisbury was through the north porch, at Old Sarum it was by the south porch. Both churches had an important eastern chapel, but in neither was it that of our Lady.

There can also be little doubt that at Old Sarum the nave and its aisles served as a parish church, and that all the building eastwards formed the church of the canons.

The division between the two sections of the church was marked by the *pulpitum* and roodloft, which was a solid structure of stone, 14½ ft. deep, filling the bay west of the tower. In front of it, on a platform of two steps above the nave floor, were two altars, one of which was no doubt the *altare parochiale* or parish altar. There was also a third step up to the passage through the *pulpitum* into the quire. In line with the front of the *pulpitum* there were probably screens shutting off the aisles from the transepts, but in later days the southern screen was replaced by a blocking wall against which stood a third altar.



RESTORED PLAN OF THE CATHEDRAL CHURCH OF OLD SARUM, SHOWING SUGGESTED ARRANGEMENT
AND PLACES OF ALTARS

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The Consuetudinary begins by setting out the titles of the *quattuor personae* or chief dignitaries, namely, dean, precentor, chancellor, and treasurer; and of the four archdeacons, of Dorset, of Berkshire, and two for Wiltshire. The chapters following are devoted to a description of their duties, and of those of the subdean and succentor, and to rules as to residence.

From the chapter on the duties of the treasurer,¹ who was to keep the ornaments and treasures of the church, and attend to all the lights, we learn that there was an image of the blessed Mary near the high altar, a beam over the altar itself, with the relics and a rood and other images upon it, and a *corona* of many candles hanging before the altar (as we find elsewhere they had at Exeter). The treasurer had also to find lights *supra murum post pulpitem lectionum*, whatever that may mean, and for the great brazen candlestick with its seven tapers. Mention also occurs of the *gradus chori*, and of the Easter sepulchre. The treasurer had also to provide a mortar (*unum mortarium*) or cresset every night throughout the year before the altar of St. Martin, and another before the western doors of the quire during mattins. He had further to refresh all the ornaments of the church at his own expense, and to provide bread, wine, water, and candles for every altar in the church, except for the parish altar (*altare parochiale*).²

The next chapter that concerns us is headed

*De Stallis Personarum in choro ecclesie Sarum.*³

According to this the four chief parsons had the end stalls. In the quire entry at the west end the dean had the right-hand stall, the precentor that on the left. At the east end of the stalls the chancellor had the first on the right on south side, the treasurer the opposite stall on the north. Next the dean was the archdeacon of Dorset, and beyond him the subdean, and next to the chancellor one of the archdeacons of Wilts. The precentor had on his left the archdeacon of Berks, and beyond him the succentor, and the other archdeacon of Wilts was next to the treasurer.

The other stalls were to be occupied by the canons next to the dignitaries, then by the priest-vicars and clerks, and a few deacons who from age and bearing were allowed to stand *in superiori gradu*, as it was called.

Below this upper rank was the *secunda forma* for junior canons, deacons, and some of the choristers; and in front of all was the *prima forma* for canons who were boys, and the rest of the choristers.

According to the *Taxacio Prebendarum* of 1227 the canons were then fifty in number, inclusive of the dignitaries. They would apparently need twenty-five stalls on each side of the quire, and with a little ingenuity it would be easy to indicate how these could be arranged. It is, however, very doubtful whether

¹ 1, 4-7.

² 1, 7.

³ 1, 13.

the quire was actually fitted with stalls of any kind, and the traces of the flooring uncovered in 1913 showed conclusively that the quire fittings were restricted to a space 5 ft. wide against the tower piers and the stone screens blocking the arches on either side, and that unless they stood upon the floor, there were no seats against the *pulpitum* like the returned stalls of later quires. If the *gradus superior*, as its name implies, was an upper range of seats against the quire enclosure, there would be no difficulty in placing twenty-five men a side in a length of 40 ft. There is likewise room for the seats of the *secunda forma* on the same platform, while the *prima forma* was probably a bench on the floor level.

But there is no need for insisting upon a definite number of seats. The chapter *De Stallis* divides the canons into (1) seniors, who sat *in superiori gradu*, (2) junior canons, whose seats were *in secunda forma*, and (3) the *canonici pueri*, or boy canons, who were *in prima forma*: so the places of the fifty canons were all over the quire.

The quire just filled the space under the tower in the middle of the church, and at the east end of the seats, athwart the eastern arch of the tower, was the step called the *gradus chori*. This formed a platform which was probably reckoned as part of the quire, and north and south of it were openings 8½ ft. wide known as the *ostia presbyterii* or upper entrances. From the platform there was another step, the *gradus presbyterii*, into the presbytery proper. This was 59 ft. long and 32 ft. wide, and apparently of three bays, with its pier arcades set upon low walls, as in the cathedral church at Salisbury. The high altar seems to have stood free in the middle of the first bay, upon a platform probably three steps above the rest of the presbytery; and over the steps, between the first pair of piers, would be the beam already noted with the rood and the relics. Somewhere in the presbytery was a seat for the bishop, but its place is uncertain. North of the altar, under the first arch, probably stood the tomb of St. Osmund, with the Easter sepulchre in the arch west of it,¹ and under the first and second arches to the south were apparently the tombs of bishops Jocelin and Roger. All three tombs were moved to Salisbury by dean William de Wanda in 1226.

In discussing the other arrangements of the church it will be well first to bear in mind the order as to the Sunday procession.

The holy water having already been made in the usual way at the quire step (*ad gradum chori*), the priest first sprinkled the high altar, and afterwards the

¹ In the statute *de officio Thesaurarii* it is directed that 'in die parasceves post depositum corpus domini in sepulchro, duo cerei dimidie libre ad minus in thesauraria tota die ante sepulchrum ardebunt'. As this passage stands it suggests that the Easter sepulchre was in the treasury, which would have been an exceptional place for it. But in two other early MSS. the preposition before *thesauraria* is *de* and not *in*, and it is evident therefore that the two wax candles were provided by the treasurer, and the sepulchre could accordingly have occupied its more usual place in the presbytery.

ministers in order, beginning with the collet. Then returning to the quire step, he stood there and sprinkled in order each of the clerks as they came up, beginning with the elders. After the sprinkling of the clerks, the priest sprinkled any lay-folk who might be standing in the presbytery.

The Sunday procession was then marshalled in this order. First a vergier with his rod to clear the way, next a boy in surplice carrying the holy water, the collet with the cross and the two taperers, and the tribuler; the subdeacon, deacon, and priest followed, with the rest of the quire in ascending order of dignity, ending, if he were present, with the bishop in his mitre and carrying his crosier.

Since the main object of the Sunday procession was to visit and sprinkle with holy water every altar in the church, the procession went out of the presbytery by the north doorway, and if there were altars in the north transept first turned thitherward to visit them. Then it faced round and went up the north aisle of the presbytery, across the east end by the ambulatory there, and down the south aisle, a pause being made in passing at each of the eastern altars for the priest to sprinkle it. The procession next visited the altars in the south transept, and continued its way down the south aisle, past the font (*per fontes*), which was apparently at the west end of the church, and then returning eastwards up the nave made a station before the rood that stood above the *pulpitum*. After the saying of the accustomed prayers and the bidding of the bedes, and the sprinkling of the nave altars, the procession passed on through the *pulpitum*, and the clerks resumed their places in quire, while the priest said a versicle and prayer at the quire step. Lastly, the priest with the other ministers went out to and sprinkled the cemetery of the canons, and said there the prayers for the dead.

On Christmas Day and other double feasts the order of the procession was varied by going about the cloister before the sprinkling of the altars. Certain other divergencies will be noted presently.

It is evident that for some time previous to the disuse and dismantling of the church this prescribed order of the processions which went round it could not have been carried out, owing to the blocking of the arch between the south transept and the south aisle for a newly erected altar. The procession must consequently, after visiting the south transept altars, have crossed the quire into the north transept, and then gone down to the font by the north aisle before turning up the nave for the station before the rood. The date of this change can be discussed with the question of the places of the several altars of which there is record.

The Consuetudinary deals next with the Palm Sunday procession. Leaving this for the present, we may pass to a further point, the manner of reading the

Epistle and Gospel. I have lately dealt with this at length in another paper,¹ but it may be useful to recall how it was done at Old Sarum.

On Sundays and festivals the Epistle was read by the subdeacon from the *pulpitum* or roodloft at the western end of the quire. The Gospel was also read from the *pulpitum*, but with much more ceremony. First one of the taperers and one of the choristers went up to the loft to adorn the eagle desk there, probably with a hanging of some sort. Then a procession was formed,² of the two taperers and the tribuler, the subdeacon carrying the book, and the deacon, from the altar and through the middle of the quire to the roodloft, where the deacon read the Gospel turned towards the north.

On weekdays the subdeacon read the Epistle at the quire step (*ad gradum chori*). The Gospel also was read, not from the eagle in the *pulpitum*, but, still towards the north, from a desk in the presbytery set up there for the purpose, which had previously been adorned by one of the taperers. The stone socket apparently for this desk still remains in the floor in the middle of the third bay.

The next matter of note is the direction as to the Ash Wednesday procession, which is headed

*De modo processionis in capite jejunii ad januas ecclesie.*³

It directs the procession, after the distribution of the ashes, to go through the middle of the quire *ad ostium ecclesie australe*, to the south door of the church, where the ejection of the penitents took place, and the doors were shut against them.

Since this ceremony always took place at the principal door of the church, it is quite evident that the directions here definitely refer to Old Sarum, where the chief entrance was in the south transept, and not to Salisbury, where it is on the north of the nave.

The same fact is brought out by the direction as to the Maundy Thursday procession, which begins:

On Maundy Thursday, nones having been sung, let the procession go to the door of the church, as on Ash Wednesday, and let the penitents be present in the church porch.⁴

Here again the reference is to the south door, as well as to the porch through which it was approached.

Again, in the direction as to processions to meet a king, an archbishop, the bishop, or a legate, the procession is to go 'through the middle of the quire and

¹ 'Quire Screens in English Churches, with special reference to the Twelfth-Century Quire Screen formerly in the cathedral church of Ely,' *Archaeologia*, lxxviii, 43 ff.

² In later times the cross-bearer headed the procession on festivals.

³ Frere, i, 138.

⁴ 'In cena domini, nona cantata, eat processio ad ostium ecclesie, sicut in capite jejunii, sintque presentes in atrio ecclesie penitentes.' Frere, i, 143.

church and go out through the south door of the church' to the appointed place of meeting.¹ This obviously cannot apply to Salisbury, where the entrance from the city is through the north porch and the south door leads only into the cloister, but to Old Sarum with its main entrance in the south transept.

Another interesting question must next be discussed: namely, the position and identity of the various altars.

Besides the high altar of our Lady the Consuetudinary mentions, under the duties of the treasurer, the altar of St. Nicholas, before which he had to find a mortar nightly, and the *altare parochiale* or parish altar, for which he was not bound to find bread and water and candles as he did for the other altars. Elsewhere there are mentioned the altars of St. Stephen (twice) and the altar of St. Nicholas (once).

The dedications of two other altars are recoverable from a charter of bishop Joscelin, c. 1179, approving an increase of the stock (*staurum*) of the prebend of Bedwin, then held by Herbert the canon, on condition

that his prebend shall for ever be bound to find three mortars burning nightly in the church of Sarum: one before the altar of the Holy Cross; another beside the high altar before the image of St. Mary; the third before the altar of All Saints.

What are probably the dedications of all the altars are derivable from another document, an inventory of the ornaments of the church found in the treasury on 30th March 1214, when Abraham of Winchester was appointed treasurer.²

This inventory mentions by name the high altar (*principale altare* or *majus altare*) and the altar of St. Martin, but gives no list of their ornaments. It enumerates, however, ornaments for the altars of

St. Peter,
All Saints,
St. Stephen,
St. Nicholas,
St. Mary Magdalene, and
St. Thomas the martyr.

We therefore again get the names of all the altars above noted, save that of the Holy Cross, as well as of three others, St. Peter, St. Mary Magdalene, and St. Thomas.

If the Holy Cross or Holy Rood altar, as I think may fairly be assumed, was one of the two in the nave against the *pulpitum*, it was probably the *altare parochiale* or parish altar, whose dedication is not otherwise known, and its

¹ Frere, i, 105-6.

² Wordsworth, *Salisbury Ceremonies and Processions*, 169-182.

ornaments would not therefore be in the treasurer's hands, because they were found by and in the keeping of the parish itself.

The ornaments of the important altar of St. Martin, which are also not given in the inventory, may have been in the hands of a special *custos*, such as one of the sacrists, while another sacrist may have had charge of the high altar.

Owing to there being two leaves missing after the inventory in the manuscript, the Rev. Christopher Wordsworth thinks that the list is incomplete, and that the ornaments of at least five more altars should follow.

My own view, however, is that the list is complete as it stands, and that it gives the names of all the altars for which there were places in the church.

Reference to the plan (plate XXI) shows that besides the high altar in the presbytery there were three altars in the three eastern chapels, two more in the nave against the *pulpitum*, and a third altar south of it. There are also places for two other altars in the eastern aisle of the south transept, thus giving a total of nine. There are no corresponding places in the north transept owing to the passage way to vestry and cloister, and any altars in that part of the church must have stood against the pillars. But there is no evidence of this, and as a matter of fact without them there are nine altars for nine places.

Taking them in order of the inventory, the altars of St. Peter and All Saints were probably in the aisle of the south transept, and those of St. Stephen and St. Nicholas in the side chapels at the ends of the aisles of the presbytery; St. Mary Magdalene's may have been the second altar against the *pulpitum*, and St. Thomas's altar that to the south of it. It has already been suggested that the Holy Cross altar was also against the *pulpitum*, so the only altar left beside the high altar, whose place is fixed, is that of St. Martin, which I would place in the important middle chapel at the east front of the church.

The altar of St. Thomas not only comes last in the list of altars, but it was probably the latest set up in the church. It was clearly not in being when the Consuetudinary was compiled, since, as has been already shown, its erection blocked the prescribed route of the Sunday and other processions, but it had been set up by 1214, when the list of its ornaments appears in the inventory.

The altars of St. Stephen and St. Nicholas could not have been far apart, since the procession at the second evensong of Christmas is directed to go 'to the altar of St. Stephen from the altar of St. Nicholas', *ad altare sancti Stephani ab altari sancti Nicholai*.¹

The importance of St. Martin's altar at the head of the church is shown in several ways. First, the treasurer had to provide the mortar nightly burning before it. Then at the procession to the various altars on ferial days during Lent, it was the first altar to be visited; and on the morning of Easter Day,

¹ Frere, i, 124.

when the sepulchre was opened before mattins, the Blessed Sacrament was laid upon the high altar, and the cross taken out in procession through the south door of the presbytery to the altar of St. Martin.

It may be noted that the mortars which burned nightly before the altars of St. Martin, Holy Cross, and All Saints, if they have been correctly located, would illuminate the floor areas of the ambulatory behind the high altar, of the south transept, and of the eastern end of the nave. The treasurer had also to find a mortar before the doors (*ante januas*) of the western doorway of the quire during mattins.

In addition to the information as to the altars, there are numerous entries in the 1214 inventory that incidentally throw some light upon the furniture and arrangements of the church.

Thus there was a towel (*tuella*) for the eagle desk (*ad lectricum aquile*), a linen cloth worked with silk for the *pulpitum* on feasts of nine lessons, and another linen cloth for the lectern on ferial days.

The list of curtains (*cortine*) includes

- two large curtains in the quire on the right side and the left ;
- two for the cross above the high altar ;
- two at the cross 'towards the new door on the south side' (*versus novum hostium a parte australi*) ;
- three on the north side before the vestry (*a parte aquilonari ante vestiarium*) ;
- two large curtains in the body of the church ;
- two in the chapter house ; and
- two for covering the crosses in Lent, probably the great rood in the nave and that above the high altar.

Among the hangings (*dossella*) were

- two hanging in the quire ;
- one above or over (*ultra*) the vestry, *quod archa Noe dicitur* (probably because it bore a picture of Noah's Ark) ;
- one above or over (*ultra*) the door towards the dean's house, (*versus domum decani*) *quod Jobi appellatur* (perhaps on account of its representing the misfortunes of Job).

The dean's house has yet to be identified ; the new door on the south side must have been either that down the nave, or one leading from the presbytery towards the canons' cemetery.

The reference to the vestry as being on the north side agrees with its position at Old Sarum, as opposed to the southern vestry at Salisbury ; and the mention of the chapter-house shows that it was in being in 1214.

Other ornaments named are

- the silver crown (*corona*) and three silver chains with a silver dove for the Eucharist that hung before the high altar ;

three palls (*pallia*) *ad tres tumbas cooperiendas*, for covering three tombs, probably those of bishops Osmund, Joscelin, and Roger, moved to Salisbury in 1226; there was also another and perhaps additional pall, *ad tumbam sancti Osmundi*, and a thick and good one for the bishop's stall (*ad stallum episcopi*); also three veils of silk, one for Lent, another for the Sepulchre, and the third for the font.

There were likewise six arks (*arche*), hutches, or chests, *preter triangulum*, beside a triangular one for the copes: of which one well bound with iron, for the charters and relics, was near the high altar; another was a long chest similarly bound with iron in which of old time the golden super-altar was kept; yet another iron-bound one was in the treasury; and the sixth was a coffer (*cofra*) in the vestry.

Returning once more to the Consuetudinary we learn that on the Monday of the first week in Lent, at mattins, all the crosses and images and relics, and the pyx (*vas*) containing the Eucharist, were covered or veiled until mattins on Easter Day. From the previous Saturday, too, until the Wednesday before Easter the silken Lenten veil was hung athwart the presbytery between the quire and the altar, probably on the line of the *gradus presbyterii*; but it was raised or drawn daily during the reading of the Gospel at mass.

There are several references to the font: in the directions for the Sunday procession, which was to go by it, and for the processions to it on Easter Even and Easter Day; also in the directions as to baptism. It is of course not to be forgotten that the church, though cathedral, had previously been and continued to be also a parish church.

I have left to the last the directions concerning certain processions that throw light on the external surroundings of the church.

First to be noted is that on the morning of Palm Sunday, a beautiful and solemn ceremony typifying the triumphal entry of our Lord into Jerusalem before his Passion.

After the blessing of the *flores et frondes*, and while the hallowed branches were being distributed, two clerks of the second form, carrying a shrine with relics in which the Eucharist was hung in a pyx, went forth with a lighted lantern in front to a place of station, where they awaited the procession.

The procession was marshalled in the usual order, but on this occasion with banners going before. It then went first about the cloister and through the gate (*per portam*) of the lay-folk's cemetery to the place of station of the shrine, which was to be at the easternmost part of the said cemetery. Here the special Gospel was read and a hymn sung by three clerks turned to the assembled people.

The procession then moved on, preceded now by the shrine, its lighted

lantern, and the banners, to the second station, which is directed to be 'before the door where the boys sing *Gloria, laus*' (*ante ostium ubi pueri cantant Gloria, laus*).

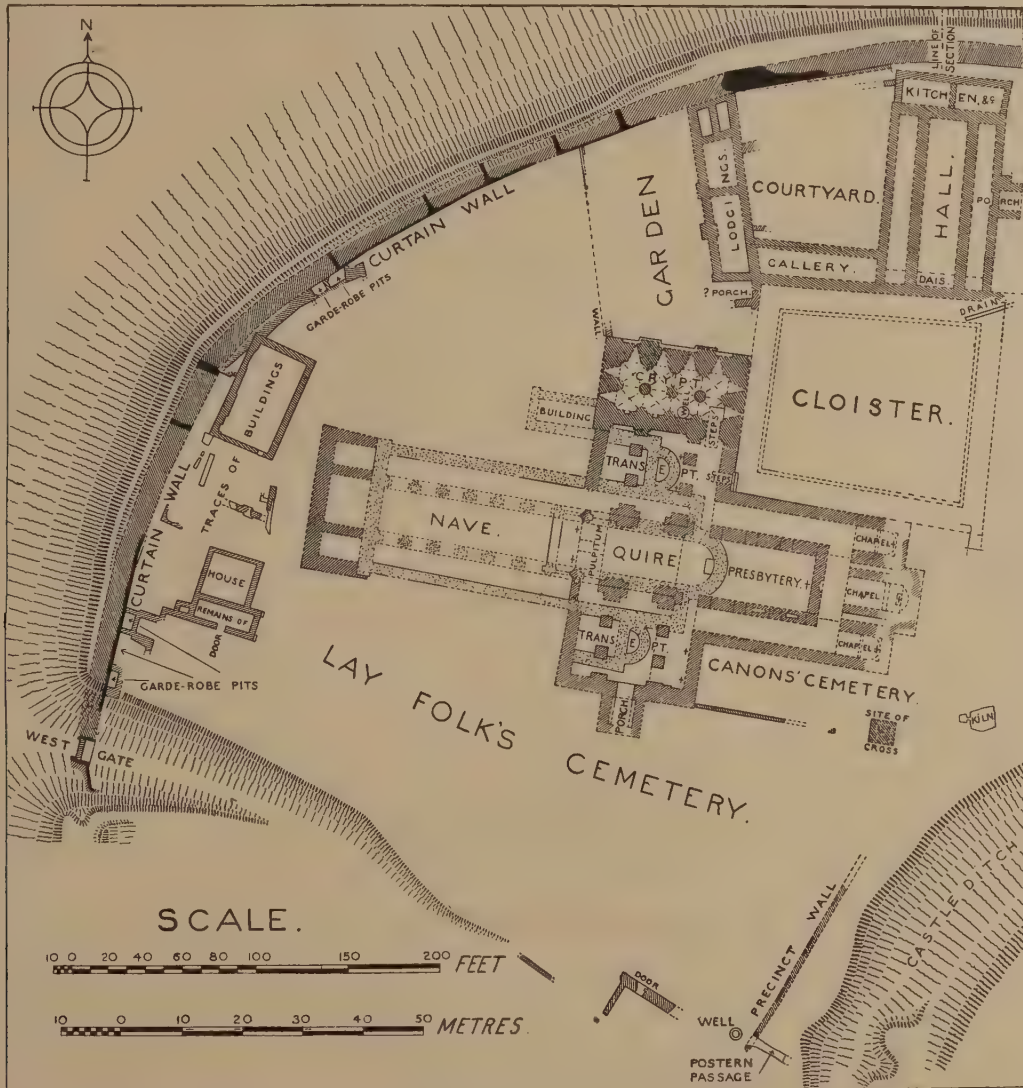


Fig. 1. Old Sarum: plan of the north-west quarter, illustrating the possible routes of the Palm Sunday, Ascension Day, and Whitsunday processions.

Then it went on to the third station, 'which is wont to be made before another door of the same church on the same side' (*que fieri solet ante aliud ostium ipsius ecclesie ex eodem latere*).

Finally it passed on to the west door, where the procession entered the church under the shrine while it was held up athwart the door (*ad ostium occidentale, et ibi intret sub capsula reliquiarum ex transverso ostii elevata*).

Within the church the last station was made as usual before the rood, which was unveiled for the occasion, and then the procession continued on into the

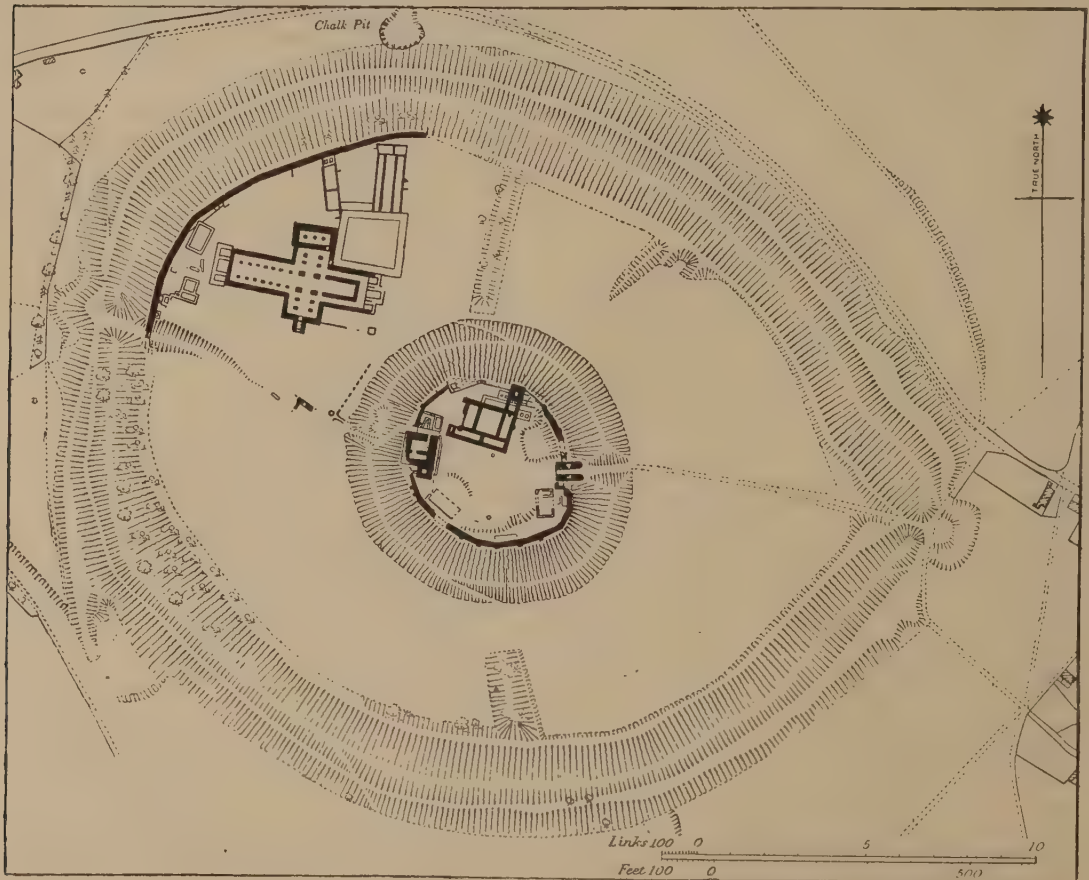


Fig. 2. Plan of Old Sarum to illustrate the routes of the Rogation-tide processions.

quire, where the rood over the high altar was also unveiled, and so remained all day.

The Palm Sunday procession at Old Sarum seems therefore to have followed this course (see fig. 1):

After traversing the cloister it apparently went out by a door in the east side or south-east corner of it, and crossing the east end of the church, entered the lay-folk's cemetery, which was bounded by a wall¹ wherein was a gate, not

¹ The eastern line of this wall is shown in the plan with our 1912 report in *Proceedings*, xxv. 100.

far from the cross at the corner of the canons' cemetery. At this cross the clerks with the shrine had probably taken their place for the first station, and hither the procession came to meet it. The second station would be before the south porch, from the roof of which the seven boys who were to be *in eminenti loco* could sing *Gloria, laus, et honor*. The third station would be before the small south door half-way down the nave, whence the procession passed on and round to the west end of the church, and entered it under the shrine through the great west door.

The Rogation processions to invoke the blessing of God upon the crops, which have next to be considered, emphasize still more clearly the fact that the Consuetudinary refers to Old Sarum and not Salisbury.

The first of these took place on the Monday before Holy Thursday, when mass and sext had been sung. After being ordered at the quire step, it went forth with banners and relics through the quire and church and out through the south door to another church in the city or its suburb.¹ Here another mass was sung, and then the procession returned as it had come, singing the greater litany, which was to end at the quire step.

On Rogation Tuesday the procession issued forth from the church as before, but with the banners called *leo* and *draco* preceding the other banners and the relics. From the church it went through the west gate of the city (see fig. 2), and passing round its north side, arrived at another church. Here mass was sung, and then the procession entered the city again through the east gate, and so returned whence it set out.

On Rogation Wednesday the proceedings were done in reverse order. First the procession passed out of the city through the east gate to the church, where mass was sung, and then traversing the south side of the city, returned to the cathedral church through the west gate.

These processions through and around the city can apply topographically only to the Old Sarum site, and not to the present city of Salisbury, which in 1210 had probably not yet come into being. The accompanying plan of the city (pl. XXII) shows that even at a later period it would be impossible for topographical reasons to carry out at Salisbury the directions of the Consuetudinary.

On the Ascension Day itself the procession, headed by the lion, the greater and lesser banners, and the dragon, and by the relics, went down the quire and nave, and out through the west door of the church. Then, turning to the north, it made a circuit of the whole church and precinct, and returned to the church as on Palm Sunday through the west door. .

¹ There was a church of the Holy Cross over the east gate of the city which was ordered in 1246 to be rebuilt (see *Proceedings*, xxiii, 192), and Leland states (*ibid.* 195) that 'yn the est suburbe was a paroch chirch of S. John'.

How the circuit was actually made is a little difficult to follow, since the great hall and other buildings uncovered in 1915 effectually bar the way. Unless therefore the procession went along the city wall there must have been a doorway through the mud wall that extended from the corner of the chapter-house subvault northwards (fig. 1). The procession could then have traversed the garden north of the chapter-house, and entered the cloister through the porch at its north-west corner, after which it could have followed the Palm Sunday route.

The Whit-Sunday procession went round the cloister as on Christmas Day, and thence followed the route of the Palm Sunday procession into the *atrium* or precinct, but returned through the west door without any station on the way.

The *capitulum* or chapter-house is mentioned several times in the Consuetudinary, and a whole section is devoted to the order in which the bishop and canons and vicars were to sit in it. The inventory of 1214 also mentions two curtains that were *in capitulo*.

The chapter-house must have been of some size, but there is no positive evidence for a separate building, since chapter might easily have been held, as we know it was at Wells, in the north transept. But what was the large chamber that certainly surmounted the massive subvault north of the transept, a chamber that may well have been 65 ft. long and 30 ft. wide? It could hardly have been the vestry, for which, and for the treasury too, there was ample room in its subvault. The most reasonable supposition, therefore, is that the chamber in question was actually the chapter-house. Exactly how it was seated is a matter of conjecture. It contained a *pulpitum* or raised desk from which the martiloge, the *tabula*, and the obits were read out, and we know that it was a place to which the clerks went *processionaliter* or in procession.

One other fact remains to be stated, that the tower in the middle of the church contained bells, which were under the care of the treasurer. Their number is not stated, but there must have been at the least three or four, since they were ordered to be rung in a peal or clash (*classicum*) on Advent Sunday, and after being silent for the last three days of Lent on Easter Day morning.

There does not seem to be any necessity for pursuing further the subject of this paper, nor for demonstrating that the later texts of the Customary and the *Processionale* cannot apply to the church and its surroundings whose plan we revealed in 1912. And I hope that I may claim to have shown not only from the architectural but the topographical evidence that the Sarum Consuetudinary relates, not to the church of Salisbury in the valley, but to that on the hill-top of Old Sarum.



VI.—*On Portions of a 'Temporale' of 1350-1380.* By the Right Reverend Bishop
GEORGE FORREST BROWNE, D.D., D.C.L., LL.D., Vice-President.

Read 3rd May 1917.

SOME ten years ago, there was brought to me in Bristol a bundle of dirty and ragged old parchments, which I bought on the chance of their proving to have some interest when straightened out and cleared of dust and dirt. They were evidently parts of a service book of some kind, and they had on them some writing in an ordinary hand of the middle of the sixteenth century. I did what I could to put them in order, and then I showed them to Dr. Warner at the British Museum.

They proved to be sixteen folios of a fine choir book, tattered and torn. The inscriptions on them showed that the chapter clerk of the cathedral church of Bristol had used them for wrapping up the accounts for five of the years 1557 onwards. The entries run in the name of the treasurer and receiver of the cathedral church. The accounts themselves had disappeared and only the toughness of the parchment had saved the covers. Not improbably the parcels had been tossed out at the burning of the bishop's palace in the riots of 1831, and a few of them had been carried off by some chance passer-by as a memento of the very formidable riots. Or, more probably, at some change of chapter clerk they had remained in one of the cupboards of the late clerk and there quietly decayed away. This, as we have had reason to know, is the explanation of many losses of valuable records.

I was advised that it was well worth while to have the sheets made good and bound, and Dr. (now Sir George) Warner was good enough to have this done for me at the Museum. I then presented the relic to the Dean and Chapter of Bristol at Easter-tide 1912. By their kindness I am enabled to show it here this evening.

The book from which these 32 pages have been taken for a servile purpose has been a really fine book, well written; the musical notation clear and good. The illuminated capital letters are rather surprisingly good, considering the comparatively late date which another feature requires us to assign to the book; they compare very favourably with some of the best of the early Sarum work. The skill of the colouring certainly brings light into the pages, and is

justly called illumination. The leaves are $18\frac{1}{2}$ inches by $12\frac{1}{2}$ inches; they have double columns, each column with 12 lines of plain-song notes and 12 lines of words; the dimensions of the part of the page thus occupied are $12\frac{1}{2}$ inches by $8\frac{1}{2}$ inches. The contents of the 32 pages are as follows:

Pages 1 and 2. FERIA iii *Quatuor Temporum Adventus* (end) to the Vigil of the Nativity (beginning).

Pages 3 and 4. The Nativity (end) and St. Stephen's Day with Sequence *Magnus Deus* (beginning).

Pages 5 to 8. The Holy Innocents (end); St. Thomas the Martyr with Sequence *Sollemne canticum*, the whole office cancelled; and the sixth day of the Nativity (beginning).

Pages 9 and 10. The Epiphany, imperfect at both ends, with Sequence *Epiphaniam Domini canamus* (complete).

Pages 11 and 12, which should have been bound as 15 and 16, FERIA ii (end), FERIA iii (beginning), after Second Sunday in Lent.

Pages 13 and 14. FERIA v (end) to *Sabbatum Quatuor Temporum Quadragesimae* (beginning).

Pages 15 and 16, which should have been bound as 11 and 12, Septuagesima (end) to Sexagesima (beginning).

Pages 17 to 24. *Sabbatum* after Second Sunday in Lent to FERIA v after Third Sunday in Lent (beginning).

Pages 25 to 32. FERIA iii after Fourth Sunday in Lent (end) to *Dominica de Passione*.

It is puzzling to find the year 1557 named as one of the years in which this servile use was made of a folio from this fine book. That was a date at which the authorities of churches were still buying service books of the old style to replace those destroyed under Edward VI. Thus we have in *Archaeologia*, xxxiv. 53-54, in the Churchwardens' Accounts of Eltham in Kent, 1556, 'received of the bequest of Thomas Adcan towards the buying of a graylle, xs.', and 1557, 'paid for a new graylle the xii September, xvs.' Queen Mary did not die till 17th November 1558. The problem is not simplified by the fact that the Augustinian Abbey of Bristol was Victorine, and its use differed materially from that of Sarum, to which school these sheets certainly belonged. When the abbey was dissolved and a bishop and chapter were put in the place of the abbot and prior and canons, the Victorine books would probably or certainly be abandoned, and books of the prevalent Sarum use put in their place, to be put away in their turn in five years' time under Edward VI. Or it may have been that at the dissolution the service books and other possessions were made away with. We are told that the spoilers had begun to pull down the abbey church under instructions; but its destruction was averted by a change of

policy on the part of the king, who determined to retain the buildings and constitute a cathedral church with bishop, dean, and canons, for which purpose fresh service books would be needed, to replace those which had been dispersed or destroyed. It would be a serious mistake to suppose that because Bristol was a 'Reformation bishopric and chapter' the old services had ceased when it was set up in 1542. The years 1540 to 1543 were specially marked by a careful 'rationale' of the full services of the Mass in all their parts.

I call the book from which the leaves have come a *Temporale*, not assuming that this *Temporale* was a book by itself. It probably had the *Sanctorale* with it, the two between them covering both the ordinary seasons and the special seasons of the Church's year, so far as the choir was concerned in the celebration of Masses. It is not in any sense a priest's book.

The feature of these leaves which seems to oblige us to assign to them a relatively late date is found in the clear and skilful pen-and-ink drawings in the margins and in the text. The illuminations proper, as separate from these, are, as has been said, very good, in a style much earlier than the pen-and-ink drawings. Indeed some of the large initial letters may fairly be described as splendid; and in spite of the usage to which the sheets have been subjected, the colouring is in many cases perfect. The Sarum *Graduale* of about 1220, which was reproduced photographically by the Plain-Song Society about 1895, has drawings resembling in many ways those now under consideration, but with foliage finials in place of the quaint faces with red tongues which the artist of the Bristol book employed, and without the lacertine and dragonesque features which are so marked in the drawings. In several cases there are, in the Bristol book, as may be seen in the plates, ornamental marginal additions to capital letters quite in the best Sarum style, without any animal or grotesque figures. The probability is that the Sarum *Graduale* supplied the motive and general plan of the drawings, and that the artist, who was decidedly clever both in imagination and in execution, occupied a middle place between the old Sarum style, which he could use with much effect, and the grotesque style of the fifteenth century which he used as a pioneer, completely without any of the coarseness which so often spoils its examples. The date may be about 1350 to 1390.

It is not easy to find the right word for describing the drawings shown in Figs. 1 and 2. I have usually called them 'grotesques', but that is scarcely sufficiently respectful; they are not like the rude scratchings on the walls of a grotto. 'Caricature' would have been more appropriate, for they are fully charged, *caricatae*, with abundant detail; but 'caricature' has become specialized in another direction. 'Burlesque,' perhaps, would be the most strictly correct word, with its suggestion of comicalness (κῶμος, a banquet), waggery, fun.

I have been assured by experts that there are plenty of examples of our

artist's style; but when I go to the fountain-heads named to me I do not find them. The British Museum was naturally one of the places named to me, and Dr. Warner most kindly and at much pains looked up four examples which came nearest to this style. They were the following:

A copy of *Bromton's Chronicle* (Add. MS. 24067), soon after A.D. 1300, has the bow and shield in the margin (see Fig. 2. 16, 19).

A copy of *Eusebius* (B. Mus., 11 E. 6), about A.D. 1330, has faces in connexion with letters.

A treatise of *Athanasius* (B. Mus., Royal, 5 F. 2), translated from Greek into Latin for Humphrey Duke of Gloucester (who states the fact on the last page), before 1347, has figures in the margin and at the foot, but not of the same quaint style as those in the Bristol manuscript.

A copy of *Martinus Polonus* (B. Mus., 14 C. 1), about 1350, has coloured animals in the margins, mostly not joined to letters, but an initial 'Q' has junction with an animal.

In none of these cases, however, is the outline drawing to be compared with that in the Bristol manuscript.

Mr. Herbert, of the manuscripts department of the British Museum, has most kindly shown me drawings in other manuscripts less dissimilar than these; but the most we can say of them is that they are 'somewhat like'.

A friend in the Vatican Library sent me two examples, but they belong to a different æon from the drawings in my sheets. The closest parallel that I have yet seen is found in a figure in the margin of f. 31 b of the Holkham MS. 458, whose date is *c.* 1327. The outline of this figure might indeed have been taken from the Bristol MS. I cannot doubt that I shall hear in due course of many examples. It is only fair to say that some nine years ago I sent to a large number of persons, likely to know, two pages of reproductions of about seventeen of the British examples, one-third of the number in the 32 pages, and no one replied that he knew plenty—or indeed any—of just such things. These two pages are shown in Figs. 1 and 2. The figures are traced from the originals, and are of the full size. The Westminster Missal, to which reference is made later on, has initial letters made up of animals and birds, without pen drawings in the margins. They are clearly later, as is the black-letter and the musical notation, than the Bristol example. The date of the book is fixed by its connexion with Abbot Lytlington to the period 1362-86 (H. B. S., vols. i and v).

In one or two cases the drawing has relation to the text. Thus on St. Stephen's Day, the A of the Alleluya has a man of malign countenance holding a big stone in his two hands (Fig. 1. 2). And on St. Thomas the Martyr's Day, in connexion with *Posuisti*, the D of *Desiderium* has a head in profile wearing

a mitre, the outlines of which are drawn in yellow ink (Fig. 1. 4). In another case a grotesque N appears to be a pun on the Communion *Notas fecisti michi uias uite* (Fig. 2. 18). In another case I think there is a reference in a very remarkable D to the *Dextera* of which it is the capital letter (Fig. 2. 14). Finally, it seems not improbable that the grotesque U in the ninth line of the second column in plate XXVI. 2 is suggested by the Martha and Mary of the text, *Uidens dominus flentes sorores*.

We may now proceed to remark on the principal features in eight of the thirty-two pages.

The contents of page 4, plate XXIII. 1, may be described in more detail than will be necessary for the other pages. It contains the concluding words of the Officium for St. Stephen's Day [*Seruus tuus exer*]cebatur in tuis iustificationibus; the Psalm, *Beati immaculati*; the Oracio, *Da nobis quesumus* [*domine imitare quod colimus*]; the Epistle, *Stephanus plenus gra[cia]*; the Grail, *Sederunt principes*; the Versus, *Adiuua me*; the Alleluya; the second Versus, *Uideo celos apertos*; and the Sequence (described as the Secretum in the Westminster Missal) *Magnus deus*. The clefs are, in the left column, B flat in line 1, F in line 2, C on the top line in lines 3-5, on the third line in lines 6-11, and F in line 12; in the right column, F in lines 1-4, D in the remaining lines, apparently placed incorrectly in line 5, to which attention has at some date unknown been called.

This page has examples characteristic of all the styles of ornamentation of the manuscript. The S of the Grail *Sederunt principes* is a fine piece of drawing of the more reserved grotesque. The A of the Verse *Adiuua me* (Fig. 2. 12) is in another effective style. The A of the Alleluya at the end of this Verse (Fig. 1. 2) is one of the most striking examples of the drawings which are the chief subject of this paper, and the clearest example of direct reference to the text. The M of the Sequence *Magnus deus* is in the best Sarum style; the red lines of decoration in the margin extend to a length of $9\frac{1}{2}$ inches, a length which is practically identical with that of all the other complete decorations of this style of capital in the manuscript. The blue of this M is less vivid than in others of the Sarum capitals in these pages; in some cases the blue can scarcely have been more vivid when it was first laid on.

This page was evidently the last page of a quire. The words of the Sequence with which the page ends are *Atque perhenni uita ornat candida dig*, the concluding portion, which came at the top of the first page of the next quire, now lost, being *niter corona*. The catchword *niter* is written at the foot of the leaf, with a nondescript creature below it, as though carrying it on. It happens, very curiously, that in the left bottom corner of the page which is bound up opposite this page, though there is a gap of some days between the two, there is a very similar creature, plate XXIII. 2, but without the coarseness



FIG. 1. 1. P. 9, col. 1. (Plate XXIV. 1.) The black-letter which is introduced below the dog is the initial letter of *Uidimus stellam eius*. The rest of the drawing forms the A of the Alleluya for the Epiphany, the remaining letters *lleluya* being in the line above the stave of notes for *Uidimus*, etc. It will be noticed that the crowned musician beats with his right hand a drum on his back, hanging round his neck. 2. P. 4, col. 1. (Plate XXIII. 1.) The initial letter of the Alleluya for St. Stephen's Day. The stone held by the man with the look of hatred on his face is tinted red in the original, with direct reference to the text. The drawing comes at the bottom of the left-hand column, so that no letter is introduced below as is the case in No. 1. 3. P. 14, col. 2. (Plate XXIV. 2.) The E of *Erubescant et conturbentur*, the Communio for Wednesday after 3 Lent. The insertion of the fish will be noticed. 4. P. 6, col. 1. The D of *Desiderium anime eius*, the Versus on the day of St. Thomas the Martyr. Again a reference to the text in the insertion of a mitred head, and in the outlines of the mitre being in yellow ink in connexion with *Posuisti* (see Fig. 2. 11). 5. P. 24, col. 1. The D of *Deus laudem meam*, the Versus for Wednesday after 3 Lent. The insertion of the fish will be noticed. 6. P. 11, col. 1. The A of *Adiutor meus et liberator*, the Gradual for Monday after 2 Lent. 7. P. 13, col. 1. The I of *Immittitelet* angelus, the Offertory for the first Thursday in Lent. 8. P. 22, col. 1. The S of *Si mei non fuerint dominati*, the Versus of the Gradual *Ab oculis* for Tuesday after 3 Lent. P. 16, col. 2, has another example of this S, for *Sana contriciones eius*, but the animal in that case has no fur on his back. 9. P. 6, col. 1. The A of the Alleluya for the day of St. Thomas the Martyr. The black-letter inserted below is to be read as G, *Gloria et honore coronasti eum*.



FIG. 2. 10. P. 5, col. 1. (Plate XXIII. 2.) The U of *Uox in Rama audita est*, the Communion for the Holy Innocents' Day. 11. P. 5, col. 2. (Plate XXIII. 2.) The P of *Posuisti Domine super caput(e) eius*, the Gradual for St. Thomas the Martyr. 12. P. 4, col. 1. (Plate XXIII. 1.) The A of *Adiuua me*, the Versus for St. Stephen's Day. 13. P. 23, col. 2. (Plate XXV. 2.) The D of *Domine quis habitabit*, the Communion following the Offertory whose initial letter is shown in No. 14. 14. P. 22, col. 1. The D of *Dextera Domini fecit uirtutem*, the Offertory for Tuesday after 3 Lent, with an evident reference to the *Dextera*. 15. P. 14, col. 1. (Plate XXIV. 2.) The S of *Saluum fac seruum tuum*, the Gradual for the first Friday in Lent. 16. P. 28, col. 2. (Plate XXVI. 1.) The D of *Domine memorabor*, the Communion for Thursday after 4 Lent. 17. P. 21, col. 1. The Q of *Quis dabit ex Syon*, the Communion for Monday after 3 Lent. 18. P. 24, col. 1. The N of *Notas michi fecisti uias uite*, the Communion for Wednesday after 3 Lent. There is probably a play on the word *notas*. 19. P. 29, col. 1. (Plate XXVI. 2.) The B of *Bonum est confidere in Domino*, the Gradual for Friday after 4 Lent. The success of the monk in stopping the mermaid's arrow with his shield is no doubt an illustration of obedience to the precept *confidere in Domino*. 20, 21. Two ordinary examples of D.

which marks it alone among the grotesques of the manuscript. The drawing of drapery in these two cases should be compared with that in Fig. 2. 10.

The British Museum Psalter Arundel 83 has catchwords at the ends of quires. Some of them are enclosed within narrow rectangles drawn with pen and ink, with a human profile in place of one end of the rectangle, curiously enough looking the wrong way, not towards the next page to which the catchword belongs. The creature on this page is also looking the wrong way, as if it had been led on to the page from the nearest margin. It may conceivably have been not from coarseness of idea that the unpleasant faces are shown at the stern parts, but from a desire to show the direction in which the catchword is to be carried.

Page 5, plate XXIII. 2, shows the mutilating hand of the chapter clerk of Bristol, who used this parchment to wrap up the chapter accounts for the years 1558-9. It is the only complete entry of this character to be found in these 32 pages. The figures 1559 are in the same hand as the later figures 1575, when John Smith was the chapter clerk and notary public, so it is probable that he was the culprit throughout, to whom—it is fair to say—we owe the preservation of our interesting pages. The entry runs thus: 'Computus Thesaurarii et Receptoris Ecclesie Cathedralis Bristol' pro integro anno finito ad festum Michaelis Archangeli Anno Domini 1559 et regni domine nostre Regine Elizabeth Anno primo.' We do not know which of the prebendaries held the offices of receiver and treasurer in 1559. In 1575 John Smith rendered the accounts as the deputy of Prebendary Arthur Sawle, receiver-general of the cathedral church, and of Christopher Pacey, treasurer. Sawle was installed in 1559 and Pacey in 1560.

The U of *Uox in Rama audita est* should be noted, and the great P of *Posuisti*. This page is specially interesting as giving the commencement of the musical part of the Mass for the Day of St. Thomas (à Becket) the Martyr. The erasure of the name Thomas in two places should be noted, and the light running of a pen through the text. The questions which this feature of the manuscript raises will be treated later.

Page 9, plate XXIV. 1, has a remarkable example of burlesque, combining the A of the Alleluya with the U of *Uidimus stellam eius in oriente*; it is shown in Fig. 1. 1.

Page 14, plate XXIV. 2, has examples of restrained burlesque in the S of the Grail *Saluum me fac* and the B of the Offertory *Benedic anima mea domino*, and a very taking E in the Communio *Erubescant et conturbentur omnes inimici mei*. The I of the Office *Intret oratio mea* is a beautiful example of the best Sarum style of illuminating letters.

Page 19, plate XXV. 1, has another beautiful example of I in the Office *In deo laudabo*. The narrow I and M of the concluding verses of the Tractus for *Oculi*

are very like the black capitals in the Gorleston Psalter. The restrained burlesque of the I in the Offertory *Iusticie domini recte letificantes* is of a character unusual in this manuscript, and not very attractive.

The really remarkable feature of this page is the P of *Passer inuenit sibi domum*, the Communion for the third Sunday in Lent. It is represented as formed with a strip of parchment, a 'schedule' as the lawyers would say. There is nothing else like it in the manuscript. On three sides of the rectangular head of the P, six words in English are beautifully written, with a very pretty *w* in two cases and with the capital letter rubricated, 'Be wel war' lest y" fayle'. the first *y* being of course the disintegrated rune for *th*. I had thought that the warning referred to a 'direct' immediately opposite, in the left-hand column, which indicates a shifting of the C clef; but the shiftings of clef and the changes of clef are so very numerous that this explanation seems quite inadequate. On one page there is a new placing of the clef on three consecutive staves, and in one place four consecutive lines have different notation. The natural reason is that the range of the notes is so large that they could not be shown on a stave of four lines with a fixed clef. Whatever the explanation may have been, it is a delightfully human touch, this 'Be wel ware lest thou fayle'; possibly unique, if anything quaint in mediaeval English work ever is unique.

Page 23, plate XXV. 2, has a very good burlesque D for the Communion of Tuesday after *Oculi*. The E of the Office for Wednesday is beautifully worked, its tendrils extending to a length of 11 inches. The D of the Offertory *Domine fac mecum misericordiam tuam* is an attractive example of restrained burlesque. The first words of this page, [*et fac*] *tus est michi in salutem*, illustrate one of the characteristics of this manuscript, namely, the considerable number of extra 'Verses'. Besides the Offertory for the Tuesday, *Dextera domini fecit uirtutem . . . opera domini*, there is a Versus, *In tribulacione inuocaui dominum*, not given in the books, and then yet another, rubricated *Alius uersus, Impulsus uersatus sum*¹ *ut caderem et dominus suscepit me*. It has been suggested to me that the survival of extra Verses in later Sarum books is due to a conservative instinct. In the ninth century the Verse was originally the psalm, after which the anthem was repeated, and this went on till the Offertory was completed, which in the earlier ages took some time. The extra Verses ceased to be needed in later times, as we shall see shortly.

Page 28, plate XXVI. 1, has an example of the use of fishes to form letters, which is carried so far in a Lombardic MS. in the Bibliothèque Nationale in Paris that all the letters of the alphabet are thus formed. It will be seen that if the D of the Offertory *Domine ad adiuvandum me* were turned upside down it

¹ Ps. cxviii. 13, Old Latin, and Gallican Psalter; Vulgate, *eversus sum*; Jerome, *pellebar*; lxx, ἀνερπάτην.

would form a Q, and this accordingly we find (see Fig. 2. 17) on p. 21, *Quis dabit ex Syon*, the Communio for Tuesday after *Oculi*. The burlesque at the top of the second column, the D of *Domine memorabor*, the Communio of Thursday after *Letare* (4th Sunday in Lent), is very striking (see Fig. 2. 16).

In the East Anglian Psalter Arundel 83 there is a mermaid in this very same attitude; but the right hand holds a mirror and the left a comb. The artist of the Bristol manuscript has very cleverly occupied the hands in archery.

The text on this page differs from other manuscripts, the Offertory *Domine ad adiuvandum me* being only the second half of the usual Offertory.

Page 29, plate XXVI. 2, affords a curious and very graphic complement to the burlesque on the previous page. The tonsured monk (see Fig. 2. 19) has received on the centre of his shield the arrow shot at him by the mermaid. The weapon flourished in his right hand appears to be a strigil, as though he was threatening to scrape off her seductive scales. The reference to the text is fairly clear. The burlesque is the B of *Bonum est confidere in domino quam confidere in homine*, the Grail for Friday after *Letare*. The P of the Offertory *Populum humilem* is a good example of restrained burlesque. The U of the Communio *Uidens dominus flentes sorores lazari* may fairly be taken as showing the profiles of two women; and the features are not unrepresentative of the characters of Martha and Mary.

In the lowest line of the right-hand column of page 11, not shown in the plates, there is *versus alius* rubricated in a canton, with a capital N at the commencement of the line, followed by a stave of four lines ruled as usual in red, but there are no notes and no other letters. On the other side, on page 12, at the top of the page, are five lines of staves ruled, with no notes and no letters. The Offertory for Monday after 2 Lent, *Benedicam dominum qui michi tribuit*, has been followed by the Verse *Conserua me domine*, and then comes this empty space, followed by the Communio *Domine dominus noster*.

Durandus, bishop of Mende, in his *Rationale Divinorum Officiorum*, first published in 1486, mentions the fact of the general omission of verses of the offertorium by the choir, and in his quaint way gives reasons. He says (iv. 27) that the long offertorium is often omitted; partly that priest and people may be more free to dwell upon the offering, prayer, sacrament; partly because, as St. Augustine says, the Christian religion itself rests upon the very fewest and most open sacraments. Who it was that ordered it to be sung in the first instance is not known, he says; but here again he finds two reasons. One reason for the order in the earlier time of the Church was, that when in times of old offerings were made to God, the offering was accompanied by the clang of trumpets. This, he points out, is seen from Numbers x. 10, where the ritual use of the silver trumpets is ordered, 'Ye shall blow with the trumpets over your burnt offerings'.

A second reason for the use of joyous music in the offertorium was found in the New Testament, 'God loveth a cheerful giver' (2 Cor. ix. 7).

A long-drawn-out offertorium was not like a long-drawn-out grail. The grail did not stop the priest in his ministration, because he was then seated, presumably listening to the choir; but the offertorium kept him waiting at an active point of ministration. As the custom of masses without communicants grew, the offerings of the people did not occupy the space of time they did of old, except of course on great occasions. Thus we can understand the omission of one at least of the verses of the offertorium. But why we should have this curious blank on this one day, and why the *versus alius* should have been rubricated and placed in a canton on this one day, has not been explained as yet. I would suggest that the writer or his supervisor felt it necessary to keep all the pages of the book an exact copy of the book which was being copied either by eye or from dictation. The reasons for this are obvious, but they do not touch the question why the omission is made only here.

The Versus omitted at this place appears as the Communio for Wednesday after 3 Lent, or rather, the earlier part of it does. It occupies $3\frac{1}{2}$ lines, whereas six lines were allowed for it on the earlier occasion. The full form in the offertorium of the ninth century was *Notas mihi fecisti vias uitae; adimplebis me letitia cum uultu tuo: delectationes in dextera tua usque in finem* (Ps. xvi. 11).¹ The space left blank would have held it all; the Communio only takes the first half, to *tuo*, adding the word *domine*. The initial letter of *notas* is shown in Fig. 2. 18. There can be little doubt, if any, that there is a play on the word *notas*; the bird-man is making *notes* on his instrument with eight holes.

Several of the sheets of the Bristol manuscript are not consecutive; there are large gaps. But folio 4 follows immediately on folio 3, and this gives us the whole of the choral part of the Mass for St. Thomas of Canterbury on 29 December. With the corresponding service for the day of his translation (7th July, 1220) our fragments have no connexion.

It is common knowledge that Henry VIII ordered the services for these days to be erased from the service books. The order has been very slightly obeyed in this case. A fine pen or style has been lightly run through every line, so lightly that it can in some cases scarcely be seen. In the rubric at the commencement, *In die sancti thome martiris ad missam officium*, the pen has been run through the bold red lines, and the *tho* in one line and *me* in the next have been partially erased. Three lines lower down the black-letter *thome* has been treated

¹ This verse is found in this place in the ninth-century Antiphoner printed in the Benedictine edition of the works of St. Gregory the Great. It is found also in the St. Gall MS. 339 of the tenth century, Einsiedeln 121 (tenth-eleventh), and Montpellier H. 159 (eleventh).

in the same way. In each case it seems that the erasure of the word *thome* was carried out before the pen was run through the lines of text. We shall see that this order of proceeding was in precise obedience to the orders issued on the subject. At later parts of the service, where the name occurs three times in the Sequence, there is no attempt at erasure. Thus the choir could continue to sing their part as though no order for erasure had been given.

I had never looked into the authorities for the statement of Henry's order in this respect until I was engaged upon the preparation of these notes. I find that there were three stages in the business, covering a period of three years.

First, Thomas Crumwell issued injunctions as the king's vicar-general in 1536. Among them was an order that 'the Commemoration of Thomas Beckett, summe time archebishoppe of Canterbury, shall be clene omitted and in stedde thereof the feriall service used' (Wilkins, *Concilia*, iii, 817, quoting Reg. Cranmer, f. 99 b). There is nothing about erasure or cancelling there.

Next is alleged a process, or trial, in 1538. The king in council declares that Becket has been summoned to appear, and that the legal adviser who has been appointed in his defence has not advanced any objections to his condemnation. The king therefore declares him no saint or martyr, and orders that he be not named in any missal, book of prayers, etc. (Wilkins, *Concilia*, iii, 836). The authority for the details of this process is an Italian book, F. Girol. Pollini, *Istor. eccl. della Rivoluzione d'Inghilterra*, l. iii, c. 42. The wording of the citation is, naturally, quaint: 'Citamus et vocamus ad supremum nostrum concilium te Thomam, qui fuisti olim archiepiscopus Cantuarien., ad agendum de mortis tuae causa, de scandalis quae commisisti contra reges nostros praedecessores, et iniustitia qua tibi martyris arrogasti nomen . . . citamus te ad audiendum sententiam, et si non sit qui pro te compareat, iuridice procederetur. Datum Londonii 24 April 1538.' The judgement, delivered 11th June, 1538, was as above, and ordered 'nomen eius et imagines ex templis eradendas nec eum in missalibus precationum libris calendariis vel litaniis nominandum'. Again nothing about erasure of services.

Finally, in 1539, an injunction by the king orders that the day of Becket be not observed, nor the service, office, antiphons, collects, and prayers in his name be read, but rased and put out of all the books (Wilkins, *Concilia*, iii, 847, quoting Fox, *Martyrs*, ii, 439). There at last we have the whole thing.

I have not found English evidence for the summons quoted in the Italian book, where the citation is described as *male fundata*. Efforts to trace its source have not been successful in this time when access to foreign libraries is at best very difficult. The Roman Bull of Excommunication asserts it; but the Bull is a controversial document, and its charges need confirmation.

We have one important piece of evidence, the reference to which I owe to

Canon A. J. Mason. It describes the investigation, but does not refer to any summons to the long-dead Thomas. It is a statement by Matthew Parker,¹ the archbishop of Canterbury, whom after the presidential address on St. George's Day, 1917, we of the Antiquaries regard as our father that begat us. Parker was thirty-four years old at the time of the Process in 1538. He was about the Court; was greatly trusted by Henry and Cranmer. He was made chaplain to Anne Boleyn in 1535. On her death in May, 1536, he was made king's chaplain. He became Master of Corpus Christi College, Cambridge, in 1544, archbishop of Canterbury in 1559. He tells us about the historical investigation and its cause in his *Lives of the Archbishops* who had preceded him. A summary of his account may be given, taken from his interesting Latin statement:

Day by day, morning and evening, the prayers written by that most acute theologian Thomas Aquinas, in elegant style, polished and rhythmic, were poured forth to the saint, soothing men's ears and moving their minds to astonishment at his tragedy. To so great a pitch had his fame risen, that the church of Canterbury had lost its title as dedicated to the Saviour, and was called St. Thomas's.² In course of time a diligent and sedulous investigation was made, the prelates and peers of the whole realm being brought in, and the king learned exactly what manner of man Thomas was, what ill deeds he had done, what disturbances and tragedies he had excited.³ Thereupon he ordered that in all books of public prayers his name as saint be everywhere removed, utterly blotted out, and erased.

There is reason for supposing that Parker was himself employed in this historical investigation. Indeed as he was the king's chaplain at the time of the inquiry, and was just the kind of man to enjoy the work and do it thoroughly, it seems probable that he played a leading part in it. In any case it is not very probable that he would omit to mention the curious summons to the dead saint, of which he must have been aware if it was really issued.

It will be observed that in his statement the erasure is to apply only to 'the name of Thomas as Saint'. With the order in that precise form the manuscript under consideration exactly complies. When the name Thomas is preceded by Saint, the name is erased. The final injunction by the king, in 1539, is not obeyed, but, as we have seen, a pen has been lightly run through every word.

¹ *De Antiquitate Britannicae Ecclesiae*, ed. 1729, p. 209.

² The *Auctor Anonymus II* of the Lambeth Library, a contemporary of the martyr, says that already in his time people would think it gravely wrong to speak of 'going to Canterbury' or 'leaving Canterbury'; they spoke of 'going to St. Thomas', 'leaving St. Thomas'. Chaucer's *Canterbury Tales*, and the derivation of the ordinary word 'canter' from the ambling pace of the pilgrims, may suggest some exaggeration in these statements.

³ Parker states his view of Becket's attitude in one pregnant sentence: 'Intolerabili arrogantia, et supra regiam auctoritatem iuraque publica, magisque quam christianae aut ecclesiasticae libertatis immunitas divino iure postulatur, se extulerat.'

In the great Westminster Missal of Abbot Lytlington these orders have been very completely carried out. In the Calendar, only the T of *Translatio sancti thome martiris* remains on 7 July, and only the S of *Sancti Thome archiepiscopi et martiris* on 29 December; and the services for those days have been so thoroughly obliterated that not a word of the collects can be read. The special Westminster Sequence defied all attempts to make it out, until, by permission of the Dean and Chapter, ammonium sulphide was applied, when every letter stood out clear.¹

It is a curious fact that, in spite of the king's determination to keep Becket out of all books of public prayer, our own Book of Common Prayer bears his mark through twenty-five of the fifty-two weeks of every year. He was ordained deacon, after his appointment to Canterbury, on Whit-Sunday. On the following Sunday he was priested and consecrated. In memory of that, he fixed the Sunday after Pentecost as the day of the Holy Trinity, up to that time a movable feast; Rome adopted this fixed date some years after. We name the remaining Sundays of the Christian year as 'after Trinity'. Rome still counts them as 'after Pentecost'.

We may now turn to a marked feature of the Mass for the Nativity of St. Thomas as found in the manuscript under consideration—the beautiful Sequence *Sollemne canticum*.

The origin of Sequences is well known. The notes of the Alleluya before the Gospel had been prolonged to great lengths without accompanying words. My schoolfellow and head master, the famous Alcuin, the guide of Charlemagne in his care for the liturgies, is claimed as the earliest author of rhythmic words to accompany these prolonged notes. Next after Alcuin, who died in 804, came Notker the Stammerer, a monk of St. Gall, born 830, died 912. He is credited with 41 of these charming rhythmic and rhyming Sequences to the Alleluya, quaintly enough called 'proses' for a reason which involves some etymological gymnastics. Some of our existing Sequences are attributed to him. His scholar, Notker the Physician, who died in 975 and did much in illuminating the St. Gall manuscripts, wrote further proses.

In course of time taste changed. The long-drawn-out Sequences were found to be too long. They came to be less frequently used, and finally disappeared from the service of the mass for great parts of the year. Apart from the question of the disuse of these proses, the provision of new Sequences had nearly ceased in Becket's time, and it is naturally of interest to inquire how

¹ The action of King Henry, in summoning and condemning the archbishop, might in this age, when prophecies of the duration of the war and the extinction of the Kaiser are found in ancient writings, be regarded as foreseen and foretold in the Westminster Sequence, stanza 20, *Licet non compareat*.

this beautiful Sequence *Sollempne canticum* was produced at so comparatively late a date. I show side by side this Sequence and the Sequence *Caeleste organum*, and it is quite clear that the Sequence for Becket's Nativity was built upon the *Caeleste organum*.

Sollempne canticum.

The Bristol Temporale.

1. Sollempne canticum hodie
resonet in terra.
2. Ad palmam martyris
exultet superum caterva.
3. Quid facis turba iucunda?
gratulare cum supera.
4. Exultet mens letabunda
psallat cristo vox libera.
5. Colebat festa dominica
devota cantuaria.
6. Intonant iussa tirannica
turbulenta milicia.
7. Dire leges et mandata
insolenter sunt prolata.
8. Loca cristo consecrata
prophanauit uis armata.
9. Set cristi sic in vestigio
stabant thome pedes recti
ut nequirent inde flecti.
10. In sui regis obsequio
arbitratus lucrum mori
capud offert percussori.
11. Gaude thoma de cuius uictoria
12. Ortus cristi cumulantur gaudia.
13. Martiris declaratur gloria
crebra per indicia.
14. Curantur per eius suffragia
languidorum milia.
15. Trucidatur flos pastorum
inter sanctuaria.
16. Nec diei nec locorum
obstat reverencia.
17. Stella maris quem letaris
te lactasse filium
18. Hunc precamur assequamur
ut thome consortium.
19. Eius prece gloriosa.

Caeleste organum.

Blume and Bannister, 1915.

1. *In Nativitate Domini.*

1. Caeleste organum hodie
sonuit in terra.
2. Ad partum virginis
superum cecinit caterva.
3. Quid facis humana turba
cur non gaudes cum supera?
4. Vigilat pastorum cura
vox auditur angelica.
5. Cantabant inclita carmina
plena pace et gloria.
6. Ad Christum referunt propria
nobis canunt ex gratia.
7. Non cunctorum sunt haec dona
sed mens quorum erit bona.
8. Non sunt absolute data
differentes sunt prolata.
9. Affectus deserat vitia
et sic nobis pax est illa
quia bonis est promissa.
10. Iunguntur superis terrea
ob hoc quidem laus est iuncta
sed decenter fit divisa.
11. Gaude homo cum perpendis talia
12. Gaude caro facta verbi socia.
13. Nunciant eius ortum aethera
lucis per indicia.
14. Subeunt duces gregum lumina
Bethlem usque praevia.
15. Invenitur rex caelorum
inter animalia.
16. Arto iacet in praesepti.
rex qui cingit omnia.
17. Stella maris quem tu parvis
colit hunc ecclesia.
18. Ipsi nostra per te pia
placeant servitia.
19. Iam dicantur alia.

Bearing in mind the facts that Becket was murdered in 1170, canonized in 1173, and translated in 1220, we must note the age of the earliest manuscripts in which these two Sequences are respectively found. It should be remembered, too, that Thomas Aquinas, to whom Parker positively attributes the touching prayers addressed to the martyr, apparently as separate from the musical parts of his Mass, was born six years after Becket's Translation, and died in 1274. That Aquinas could write not only touching prayers but also a very touching Sequence, is shown later, on page 145.

Blume and Bannister, in their collection of Sequences, find the *Caeleste organum* in one French manuscript of century 10-11, and in several French manuscripts of century 11. Thus the *Caeleste organum* had been in use for a long time before Becket's death. It was best known, if not exclusively known, in France in its earliest times. Historical considerations suggest that the details of Becket's Mass were arranged in France, and there, no doubt, the source of inspiration was found.

The *Sollemne canticum* does not appear in the Sarum Missal which lately belonged to Lord Crawford. Dr. Legg printed that manuscript as the earliest of the known examples in his recent edition of the Sarum Missal. Nor does it appear in the Parisian manuscript which he places next to Lord Crawford's. But it does appear in the Bologna manuscript 2565 at Oxford, which he places third in order. It has flaws there—*turbida* in stanza 3, *declarantur* in 13, *Hec* in 16. It reads *Iubilet* in stanza 4, *insolenter* in 7, *luctum* in 10.¹ The Sequence must be regarded as a comparatively late addition to the Mass for the day of St. Thomas the Martyr, probably about the third quarter of the thirteenth century. The phenomena tend to support the theory of authorship which is suggested on page 145.

If we compare the two Sequences on page 141, we find that the relation between them is quite unmistakable. The fidelity to form, where there is no similarity of phrase or idea, is very close and in some cases very interesting. Each change of metre is exactly copied, however unsmoothly the syllables run.

The words at the end of *Caeleste organum* are very quaint, 'Now let us turn to something else'. Our author felt bound to have a similar if more suitable tag, and the appositeness of his tag is charming, a sort of murmured echo of the preceding idea.² In several cases Sequences have an expression of hope or pious wish at the close, such as

Quod ipse nobis concedat qui vivit et regnat

on the day of SS. Justus and Clemens (Bl. and B., no. 51). A Sequence

¹ I do not find any variant from the *ut* in stanza 18.

² The apparent departure from syllabic fidelity, eight syllables in place of seven, is explained on page 143.

from Cîteaux (Bl. and B., no. 144) has what may have been a very human touch in its tag to a hymn on the Resurrection, if it referred to the community in which it was sung—

Capiti sit gloria membrisque concordia.

But such cases appear to be rare.

Blume and Bannister describe this *iam dicantur alia* as 'eigenartig', but the Sequence *Gaudete nos fideles* which follows next but one in their collection has the tag

Ad ultimum laus est ducta
psallat chorus alia.

This is not the only case in which a well-established Sequence is adapted to serve for the day of St. Thomas the Martyr. Dr. Legg prints on page 464 of his edition of the Sarum Missal two Sequences *de Sancto Thoma* which are not found in any of his best manuscripts. One of these is built upon the beautiful Sequence for the first Mass on Christmas Day in the Westminster Missal, of which stanzas are quoted for another purpose on page 147. It will suffice to place side by side three of the stanzas of the two Sequences:

<i>Westminster.</i>	<i>Sarum.</i>
1. Letabundus exultet fidelis chorus alleluya.	1. Letabundus sit iucundus uoce sonans alleluia.
5. Sicut sydus radium profert uirgo filium pari forma.	5. Sicut rosa lilium londonia filium parit thomam.
9. Ysayas precinit synagoga meminit numquam tamen desinit esse ceca.	9. Ysias sectus est thomas ense nectus est probans quod electus est deo digne.

It will have been noticed that the very pretty tag *Eius prece gloriosa* does not agree syllabically with the quaint *Iam dicantur alia*. To this one exception from perfect syllabic fidelity we must now turn.

We have in the Bristol MS. a sheet containing the later stanzas of the Sequence *Caeleste organum* from *ta verbi socia* in stanza 12 to the end. The close connexion between the two Sequences is shown by the fact that the notes of the chant are the same in the two Sequences, and the clefs and changes of clef are the same. Instead of the tag *Iam dicantur alia*, our MS. has *Resonent cuncta redempta*, and in this it has the support of eight thirteenth- and fourteenth-century MSS. With this tag the one exception from perfect fidelity to type in the *Sollemne canticum* disappears. It is an interesting lesson on the strictness

of the application of the plain song to the syllables to which it is sung. It may be remembered that when the elder Notker submitted to his master Yso his first essays in writing words for the Sequences to help him to remember the tunes, Yso returned them for correction, saying to him, *Singulae motus cantilenae singulas syllabas debent habere*. That was the principle in the ninth century.

Attention should be called incidentally to the excellent use made by the author of *Caeleste organum* of the Vulgate reading of the heavenly hymn at the Nativity, *In terra pax hominibus bonae voluntatis*, as contrasted with our Authorized Version which has caused such difficulty and has led to so much hostile criticism, 'On earth peace, good will towards men.' It used to trouble us a good deal in our East End hecklings when I was bishop there, for the simple explanation that it was a mistake was received sometimes with jeers before we had made friends and had inspired confidence. It is of course well known now that our misleading rendering was due to the omission of the final sigma in the word *εὐδοκίας*.

The beauty of the Sequence poem *Caeleste organum* is in itself sufficient to account for an exactly similar metrical poem being written for another occasion. But it appears to be certain that effective melodies were present to the mind of the earliest as of later writers of Sequences, and that these melodies decided the rhythm or the metre of the Latin lines. We have the well-known and established story of the flight to St. Gall of a French monk from the storm of Jumièges in 860¹ with his service book of melodies with verses set to them. Notker was moved to supply the St. Gall wordless melodies with rhythmic words. This is not the occasion for remarks on the 'one note one syllable' method, or on the old question of accent as against quantity now as keenly discussed in English as ever it was in Latin. It is of course much more easy to make quantity yield to accent in words sung to plain-song melodies than in verses read as poetry. It may be taken as a general principle that varying words were early set to melodies, rather than melodies to words.

Another example of curiously close copying of quantitative change of metre is afforded by the Sequence *Gaude stella rutilans*. As evidence of copying it will suffice to give the first two stanzas,² though the changes in metre, so closely copied, do not come till much later in the Sequence.

In Purificatione B.V.M.

- i. Gaude stella rutilans
Maris mane radians
Nostra spes et gloria.

¹ Frere, *Winchester Troper* (H. B. S. viii), xxi. It should be carefully noted that this story assigns the priority in the composition of Sequence poems to France, not to Germany, to use modern names.

² Blume and Bannister, vol. 54, no. 199.

2. Per te regem sceleris
Factor uicit aetheris
Cum summa uictoria.

The only reference for this is to Grad. MS. Modoetinum saec. 15, quite late.

The Sequence on which it is based is early. The references are early-Andegaven. saec. 11, Cameracen. saec. 11-12, and a vast number of others down to the fifteenth century. It was clearly very popular.

*In Resurrectione Domini.*¹

1. Mane prima sabbati
Surgens filius Dei
Nostra spes et gloria.
2. Uicto rege sceleris
Rediit ab inferis
Cum summa uictoria.

In each case there are fifteen stanzas, and the later Sequence copies closely the variations in construction and metre of its predecessor.

In connexion with the almost complete disuse of Sequences in the later middle ages, we must note one point which has direct bearing on Parker's information about the writing of the prayers to St. Thomas the Martyr by Thomas Aquinas, and on the suggestion made above that Parker limits the work of Aquinas to the prayers. The festival of Corpus Christi was of late appointment, later than the time of free addition of Sequences. Its date falls in 1262, in the curious papacy of Urban IV. It was confirmed in 1318 at Avignon. When in the end the Church of Rome gave up all Sequences but five, one of the five retained was the Sequence *Lauda Sion Salvatorem* for Corpus Christi, and that Sequence was written by Thomas Aquinas in 1264. With Parker's evidence about the preces, and this evidence about a Sequence, we may fairly think we have ascertained the authorship of those parts of the Mass of St. Thomas which were specially written for his day. Indeed, considering the dates, we may imagine that Aquinas wrote the *Sollemne canticum* after his studies in Paris, and his success in this composition led to his being employed to write the Sequence for Corpus Christi.

The Westminster Sequence for the day of St. Thomas,² *Per unius ortum floris*, was quite different. It is supposed to have been peculiar to Westminster. It is long and elaborate, twenty-one stanzas of three lines each, in place of eighteen stanzas in the Bristol Sequence, of which only two have three lines. The rhymes are in many cases very taking. It is extraordinarily easy to rhyme in Latin, owing to the sameness of terminations and inflexions. The

¹ Bl. and B., vol. 54, no. 143.
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² H. B. S., Westminster Missal, vol. 1, col. 55.
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Westminster Sequence rings the changes on *flos* and *ortus*, naturally including a play upon the words *ortus* and *hortus*:

Si uis nosse floris ortum
nostri thome norunt ortum
felices londonie

In hoc orto flos est natus
.
.
.
.
.
uernat thomas flos anglorum;

we have in the Bristol Sequence

trucidatur flos pastorum,

and

ortus Christi cumulantur gaudia.

The Westminster Sequence has

hic armatus zelo recti
dum non potest nec uult flecti;

the Bristol Sequence has

stabant thome pedes recti
ut nequirent inde flecti.

Those cannot be accidental coincidences; they point towards some sort of connexion between the two English forms.

The Westminster Sequence may be given here for purposes of comparison:

- | | |
|---|---|
| 1. Per unius ortum floris
circa finem temporis
creuit florum copia. | 2. Flos hic florum christus fuit
qui per carnem floruit
ut florent omnia. |
| 3. Ex hoc flore singulari
sorte quadam compari
florum surgunt milia. | 4. Dum a christo sumunt uires
quos decreuit martires
sola christi gracia. |
| 5. Hos ut hostes odit mundus
hos ut ciues rubicundus
sponsus ille diligit. | 6. Qui ad suum dyadema
roseum et candens scema
pari uoto colligit. |
| 7. Hii triumphant in agone
hii de christi passione
sibi pingunt stigmata. | 8. Fide firmi spe robusti
ferro cesi flammis usti
set nunc habent sabbata. |
| 9. Inter tales celi flores
inter primos et maiores
uernat thomas flos anglorum. | 10. Qui pastoris curam nactus
pastorales gessit actus
uiam tenens perfectorum. |
| 11. Non hunc pompa mundi fregit
non terrena uis coegit
ut exponat lupis gregem. | 12. Uicit carnem mundum spreuit
qui mundanum non decreuit
set celestem sequi regem. |
| 13. Si uis nosse floris ortum
nostri thome norunt ortum
felices londonie. | 14. Urbs insignis urbs fecunda
urbs excellens nec secunda
constantini glorie. |

- | | |
|--|---|
| <p>15. In hoc orto flos est natus
cuius totus uite status
per successus floruit.</p> <p>17. Hic armatus zelo recti
dum non potest nec uult flecti
exulat ad libitum.</p> <p>19. Iam exutus tunica
thomas ope medica
flagrescit per secula.</p> | <p>16. Primo regis candidatus
primus regni post sacratus
primas esse meruit.</p> <p>18. Revocatus ense cadit
sic flos [florum] florem tradit
thomas christo spiritum.</p> <p>20. Licet non compareat
nec in carne floreat
florete per miracula.</p> |
|--|---|
21. Cuius excellencia
graciam de gracia
prefert egris alleluya.

The second line of stanza 18 has only six syllables in the manuscript. *Florum* has been inserted to fill the syllabic gap.

Something should be said on the very pretty phrase *Stella maris* applied to the Virgin Mary in the *Caeleste organum* for the Nativity and copied into the *Sollemne canticum*:

Stella maris quem tu paris
colit hunc ecclesia

and

Stella maris quem letaris
te lactasse filium.

The idea of the Star, as applied to the Virgin Mother, is worked out very gracefully and reverentially in another Sequence on the Nativity, the well-known *Letabundus*, no. 2 in Blume and Bannister, vol. 54. The examples collated by them are mostly French, but we have the Sequence in full in the Westminster Missal, Henry Bradshaw Society, vol. i, col. 39. Four of the stanzas may be given here:¹

- | | |
|--|---|
| <p>3. Angelus consilii
natus est de uirgine
sol de stella.</p> <p>5. Sicut sydus radium
profert uirgo filium
pari forma.</p> | <p>4. Sol occasum nesciens
stella semper rutilans
semper clara.</p> <p>6. Neque sydus radio
neque uirgo filio
fit corrupta.</p> |
|--|---|

That is a beautiful development of the simile of the Stella, but there is not any reference to the sea.

There has been uncertainty as to the origin of the phrase *Stella maris*. It has been attributed to Venantius Fortunatus, bishop of Poitiers, the last representative of Latin poetry in old Gaul. He was born about 530. He wrote

¹ Other stanzas are quoted on p. 143.

Latin hymns for the Christian seasons, and very lengthy Latin poems, very dull. In the Roman edition of his works in 1786, Luchi prints two hymns (part I. viii. 4, 5) of which he says that the Church had consecrated them by use, and that a previous editor, Cl. Tomasi, had included them among the works of Fortunatus; he therefore includes them. The first has nothing to our purpose beyond

Excelsa super sidera

and

Intrent ut astra flebiles
Coeli fenestra factus es.

The second has our phrase:

Ave maris stella
Dei mater alma,
Atque semper virgo
Felix coeli porta.

In the poems whose authorship is allowed generally to Fortunatus, we find cognate ideas respecting the Stella, but I have failed to find anything connecting the Stella with the sea.

Thus I. viii. 6:

- l. 1. Culmina multa polos radianti lumine (*v. l. culmine*) complent.
l. 25. Inde Dei genitrix pia virgo Maria coruscat.

and again:

Cuius honore sacra genitrix transcendis Olympum
Et super astrigeros erigis ora polos.

As far as I can judge, Fortunatus was far too heavy and dull a writer to have produced the stanzas quoted above, and the several reasons for rejecting them as his appear to be adequate. There are a fair number of examples of the phrase, here and there among Sequences and Hymns, but not so many as from its beauty we might have expected. Thus:

Bl. and B., vol. 53, no. 104. *Congaudent angelorum*, ascribed to Notker,

st. 9. Quam splendida
polo stella maris rutilat
Quae omnium
lumen astrorum et hominum
atque spirituum genuit.

found in the Mainz Troper an. 967-72, Cod. Londinen. Add. 19768.

No. 105. *Ave, Dei genitrix summi.*

st. 2. Virgo semper Maria
stella maris prelucida.

found in two manuscripts of cent. 11-12.

No. 108. *Salve porta.*

st. 2. Maris stella
inclita domina
virgo materque Dei Maria.

found in four Tropers of cent. 10 and 11.

No. 110 c. *Sancta tu virgo Maria.*

st. 20. Primo fidelis verbo Gabrielis
quae stella maris
clara semper nominaris
st. 21. Quae clarum mundo
lumen protulisti.

found in the same Mainz Troper as 104.

No. 97 a. *Plaudite laudes.*

st. 10. Ipsa enim est Maria
stella figurata maris
et domina
totius creaturae dicta.

found in three Beneventum Tropers cent. 11, and one cent. 12.

Bl. and B., vol. 54, no. 216. *Ave Maria gratia plena.*

st. 11. Ergo maris stella verbi Dei cella et solis aurora	st. 12. Paradisi porta per quam lux est orta natum tuum ora.
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These examples are all of them to be called relatively very early.

I have failed to obtain from any expert any adequate suggestion as to the origin of the phrase. Alcuin with his numerous journeyings on the sea is a more likely person than Notker at St. Gall, but Notker may often have looked down from his mountainous district upon the Bodensee, or entrusted himself to the caprices of that inland sea. It used to be said that Mary is the same word as Miriam, and that Miriam in its last sentence speaks of the sea and in its first of a star; but that derivation of the word is rejected. It may be that a mere play upon the similarity of appearance and sound between Maria and Mare gave the first suggestion, especially when Mare is used in the plural. There is a couplet in one of the early Goliard's verses, called the Cambridge Songs from the unique eleventh-century manuscript in the University Library, which illustrates this possibility or probability:

Archos¹ te protegat qui stellas et polum
fecit et maria condidit et solum.

The close grouping together of the stars and the pole, so frequently occurring

¹ *Arcos* in the original.

in Sequences on the Virgin, with the sea and Maria, could hardly fail to suggest the *Stella Maris*.

The remark that Alcuin's personal experiences rendered him more likely than Notker to have created the phrase, suggested a search for some reference to similar ideas in the very numerous poems of Alcuin which we possess.¹

Of the inquiring soul he writes (col. 647):

Quae mare quae terras quae coelum pervolat altum.

Of the Virgin Mary (col. 749):

Tu regina poli,

and again (col. 757):

Auxiliare tuis precibus pia virgo Maria
Aeterni regis famulos regina polorum,

and again (col. 771):

Tu regina poli campi flos lilia mundi
Hortus conclusus vitae fons vena salutis,

and at last (col. 774):

Virgo Maria Dei genitrix castissima Virgo
Lux et stella maris.

Thus Notker, who has hitherto held the record, must give place to our English liturgist Alcuin, who died twenty-six years before Notker was born, and fifty-six years before Notker's soul was stirred by the arrival at St. Gall of the French monk from Jumièges² with the examples of Sequences in use at that great abbey.

Curiously enough, we can connect Charlemagne and therefore Alcuin with the services at Jumièges, and thus add yet another link to the chain which fixes the main credit of the development of the services of the Mass on the Master of the School of York.

Tassilo III, duke of Bavaria, had joined his brother-in-law, the Lombard Adalgis, against Karl. They were overthrown in 787. Tassilo was condemned to death at Ingelheim, in 788, but the death sentence was remitted, and Tassilo and his son Theodo, the last of the Agilolfings, were to be confined in some safe place. Alcuin was at this time Karl's chief adviser. He lived with him from 782 to 792, and again from 793 to his death in 804. The place selected for the imprisonment of the Agilolfings was the abbey of St. Philibert at Jumièges, a few miles west of Rouen. There Tassilo died in 794. Thus Karl and Alcuin

¹ Migne, *P. L.* ci, col. 713-848, and also among his letters and other writings. One result of the search is a realization of the barefaced copying of phrases and ideas and whole lines from another great Englishman, Aldhelm.

² See page 144.

were in very close touch with the abbey of Jumièges through a series of years, and we cannot doubt that Alcuin's hand was active in the composition and collection of the Sequences which fifty-six years after his death were taken to St. Gall, and there became the leading exemplar of centuries of Sequences, including all the beautiful imagery of the *Stella Maris*.

Canon M'Clure informs me that in the late middle ages the mariner's compass was called the *Stella Maris*. It seems probable that this has no connexion with the liturgical use of the phrase. From early times pictorial phrases had been in use in connexion with processes of nature. The case of the zodiac is familiar to all of us. That word is incorrectly used by itself. Its use is like that of the adjectival word cathedral, instead of the proper phrase cathedral church. The zodiac should be called the zodiac circle. It is simply a pictorial representation of twelve zodia (little animals) in a ring. Its literal Latin name would be *Circulus Animalium*. Before the time of the mariner's compass there were similar drawings of a circular chart of the winds, called from its circular form, and perhaps from ornamental appendages suggesting the idea of petals, the Rose of the Winds, *Rosa Ventorum*. We have several early drawings of this circle of the winds, notably two in the great manuscript of Matthew Paris in the British Museum Cotton Nero D. 1, the *Chronica Maiora*, which Dr. Luard describes as 'f. 184, note of the winds and their nature, and below a circular unfinished scheme of the winds "secundum Mag. Elyam de Derham"; f. 184 b, a much more complete table of the winds'. A similar figure in Cotton Jul. D. vii, f. 51 b (compiled also under the eye of Paris), is stated to be 'secundum Robertum Grosseteste episcopum Lincolnensem'. The *Rosa Ventorum* is the 'shipman's card' of the first witch in *Macbeth*.

When the card of the compass came to be drawn, with sharp-pointed wedges proceeding from the centre of a circle towards the circumference N. E. S. W. and four intermediate sharp-pointed wedges, it would have been difficult to avoid calling it a star, *Stella*, and its primary use for mariners at sea made the *Maris* follow naturally.

A curious link between the *Stella Maris* card and the *Rosa Ventorum* chart is a further argument for this pictorial view. The *Rosa*, in use in the Mediterranean, had at its north point a T, for *Tramontana*, sometimes in the shape of a T, sometimes as a spear-head, sometimes as an approach to a lily. The fleur-de-lis on the modern compass card is the survival of the *Tramontana T* of the *Rosa Ventorum*.

As an alumnus of the School of York, of which Alcuin was a scholar from his earliest years and in middle age was head master, I find pleasure in associating Alcuin's action in scriptural and liturgical matters in Francia with

his general studies in the York School and his religious life in York Minster. We gather something of this from parts of a letter which he wrote in 796 to King Karl, so soon to become the Emperor Carolus Magnus, the Blessed Charles as he became on beatification by the Pope.¹ Alcuin had retired from his busy life at the Court of Karl and the mastership of the Palace Schools, and had gone to his abbey of Tours, where he had opened a school on the pattern of the School of York. It should be borne in mind that Tours was then, as now, rich in wine, honey, fruit, and flowers. This is what he wrote, 1,120 years ago:

I, your Flaccus, in accordance with your desire and good pleasure, am busy with ministering, under the roof of the holy Martin, to some the honey of the holy Scriptures; others I seek to inebriate with the old wine of ancient disciplines; others I shall begin to nourish with the apples of grammatical subtlety; some I purpose to illumine with the order of the stars, as the painter nobly adorns the roof of the house of God. I become very many things to very many men, that I may educate very many to the profit of the holy Church of God, and the honour of your imperial realm; that no grace of Almighty God in me be unemployed, and no part of thy bounty be without fruit.

But I, your poor servant, need some of the more abstruse books of scholastic learning which I had in my own land by the devoted labour of my master, and to some extent by my own labour. I say this to your excellency, that you may be pleased to allow me to send some of our young men to pick out what I need, and bring to Francia the flowers of Britain; that not in York only there may be a garden enclosed (*Song of Solomon*, iv. 12-16), but in Tours also the scions of paradise may bear fruit; that the south wind may come and blow through the gardens by the river Loire, and the spices thereof may flow forth.

The 'Master' to whom Alcuin refers in this pleasantly bright letter, so suggestive of pretty Latin verse, was Archbishop Albert of York, head master of the school, a cousin of the king; he succeeded in both offices Archbishop Ecgbert of York, the king's brother. These two built up the great library of York, which Albert bequeathed to his pupil and successor Alcuin, who left the bulk of it at York when he finally resigned the mastership and joined Karl in France. The York School Song names these two benefactors:

Ecgbertum, Adalbertum, principes,
Summos magistros, archipraesules,
Honoris hos laudamus apices,
Tot conferentes nostris codices.

This action of Alcuin set the example of free borrowing and procuring of

¹ *Encyclopaedia Britannica* says he was canonized by the antipope Pascal III at the instance of the Emperor Frederick I, and Louis XI of France gave strict orders that the feast of the saint be observed. Migne calls him only Beatus.

manuscripts from England by France. It is now generally known that the Coronation Service of French kings affords remarkable evidence of the influence of the English Church upon the religious services of France, in the early times when the Anglo-Saxon Heptarchy was being consolidated into three or two main divisions, and for centuries after that. The Pontifical of Archbishop Ecgbert of York, of about 745, gives us considerable parts of our present Coronation Service. We have in England only one other Anglo-Saxon form of coronation, considerably later, and it describes the king as raised to the royal throne of the Angles and Saxons. Curiously enough, it is only in the Coronation Services of French kings that we find our earlier Anglo-Saxon coronation forms dating between the two already mentioned. Of these there are three MSS. of early date. One of these, from Corbie, describes the Frank king as 'elected to the kingdom of the whole of Albion, that is to say, of the Franks', this gloss being probably an interpolation from a marginal note. A further evidence that this form came from England is found in the fact that the only saint mentioned besides the Virgin and St Peter is 'Holy Gregory, Apostolic of the Angles'.

In the Bibliothèque Nationale of Paris there is a second Order for the Coronation of a king of the Franks which is indubitably an Anglo-Saxon Order. Its prayer for the permanence of the throne prays 'that the sceptre desert not the royal throne, that is to say, of the Saxons, Mercians, and Northumbrians'.

In a third Order for the Coronation of French kings, from the Pontifical of the illustrious church of Sens, we find the same prayer 'that the sceptre desert not the royal throne, that is to say, of the Saxons, Mercians, and Northumbrians'. In this case, as in the second Order, these three races are described as 'both these peoples', no doubt because both Mercians and Northumbrians were Angles. Curiously enough, the solecism of naming as the national saint the Holy Gregory, Apostolic of the Angles, is no longer retained in this Sens Order. While retaining, as we have seen, the description of the throne of France as that of the Saxons, Mercians, and Northumbrians, it removes St. Gregory, the Apostolic of the Angles, and names as the national saints St. Denys and St. Remi.

It is a quaint fact that Charles V of France was crowned, so late as 1364, with a form which named the throne as that of the Saxons, Mercians, and Northumbrians, while at the same time the peers of Guienne swore to protect their king against the king of England, his children or allies. We must suppose that the Anglo-Saxon form for the sacring of the king of the Saxons and Angles was used for the French king in the original Latin without any change, and the error in the description of the throne was not noticed beforehand and was not detected, or was slurred, or possibly read as *Francorum*, when the ministrant sang the words rapidly in a vast space. That there is no doubt of the facts is

shown by the signature of the king between the Latin part and the French part of the service, and by the king's statement (col. 54) that the book is his property and was drawn up, corrected, written, and historiated by his order in 1365, the year after the consecration. The Latin runs thus:

ut regale solium videlicet Saxonum Merciorum Nordan-chimbrorum¹ sceptrum non deserat.

The oath of 'the barons of Guyenne', taken in their name by Guillaume Sire de Mareul, contains the words:

et touz ses autres droiz Royaulz li garderay et li aideray a tenir et garder de tout mon pouvoir, enuers et contre le Roy dangleterre ses enfans ou alliez.²

Alcuin remained a deacon to the end of his life, but he was very careful about the services in his chapel; and, as we shall see, he did not scruple to give to priests many instructions and supplements in the singing of masses. He needed the constant attendance of a priest to celebrate mass. For this purpose he kept with him always an Englishman, Sigulf, warden of the church of the city of York, of whom we are specially told that he was sent to the city of Metz to learn chanting. It is incidentally interesting to note that when Charlemagne's three sons, all called kings, though we should call them subkings, presented themselves at the altar, the deacon Alcuin with his own hand administered to them the Communion of the Body of Christ and the Blood, the priest Sigulf standing by.

Finding that the service books in Francia had been seriously debased by ignorant copyists, he took in hand their correction, and carried it out so effectually that the service books of the middle ages owed more to Gallican than to Roman influences. We have seen how the whole system of Sequences took its rise in France, from an abbey church with which Alcuin was certainly concerned. The Holy Scriptures themselves had become debased by the same process of ignorant copying of manuscripts, or, at least in no inconsiderable number of cases, by the process of multiplying copies by dictation to a number of scribes by a reader whose enunciation was not always quite clear.

The very serious work of correcting the errors due to these causes was entrusted by Karl to Alcuin, who accordingly carried out a revision of the Scriptures. It is in the recollection of many of us that we have had regretfully to abandon the belief that one of the great treasures of the British Museum is the actual copy of the revised Scriptures which Alcuin presented to Karl. The Karl to whom it was presented was an early Karl, but not Charles the Great.

We are able to assign to Alcuin's creative mind an even larger share in the building up of liturgical forms than we have as yet certified or suggested. We

¹ Evidently a Wessex order of precedence.

² H. B. S., vol. xvi, coll. 27, 57; B. Mus. Tib. B. viii.

have direct evidence of his care for precisely that part of divine service with which in this paper we are specially concerned, namely, the selection and the singing of the psalm from which the Versus under its various names came. This evidence is found in a letter of which the contemporary biographer of Alcuin wrote thus:

The father Alcuin had with great care instructed Karl¹ in liberal arts and in divine scripture. . . . He taught him, also, which of the Psalms he should sing throughout his whole life for various occasions; for times of penitence, with litany and entreaties and prayers; for times of praising God; of any tribulation; and for his being moved to exercise himself in divine praise. And any one who wishes to know all this may read it in the little book which he wrote to Karl on the principles of prayer.

The *libellus* is Epistle no. 244 in Wattenbach and Dümmler's *Monumenta Alcuiniana*. The MS. is in the Bibliothèque Nationale at Paris. It is headed *Carolo Imperatori breviarium supplicandi ad Deum*, and its first words are:

Beatus igitur David rex magnus et servus Dei altissimi nobis psallendi regulam dedit,

a rule for singing psalms.

In this treatise Alcuin arranged three courses of psalms for the night and seven for the day, and then passed on to explain, in accordance with a special request from Karl, the order in which a layman in active life should pray to God at the stated hours:

When you have risen from your bed, say first 'O Lord Jesu Christ, son of the living God, in Thy name will I lift up my hands, make haste to deliver me'. Say this thrice, with the psalm 'Ponder my words, O Lord, consider my meditation. O hearken thou unto the voice of my calling, my King and my God, for unto Thee will I make my prayer. My voice shalt Thou hear betimes, O Lord, early in the morning will I direct my prayer unto Thee.' Then, 'Our Father', and the prayers 'Vouchsafe, O Lord, to keep us this day', 'Perfect my steps', 'Praised be the Lord daily', 'Direct and sanctify', 'O Lord, let Thy mercy lighten upon us'. Then, rising, begin the verse 'Thou shalt open my lips, O Lord'. When that is ended, with the Gloria, begin the psalm 'Lord, how are they increased'. Then follows 'God be merciful unto me'. Then, 'O come, let us sing unto the Lord'. Then psalms, as many as you will.

Alcuin devoted much time and pains to making selections of psalms for constant use and for various occasions. His instructions show that he meant the psalms to be chanted, for private as well as for public use. He himself on his death-bed sang the evangelical hymn to the Virgin Mary, with the Antiphon²

¹ Whether this means Charlemagne or his son Karl, who died three years before him, does not matter for our present purpose.

² Isa. xxii. 22.

O clavis David et sceptrum domus Israel, and then chanted the psalms, 'Like as the hart', 'O how amiable', 'Blessed are they', 'Unto Thee lift I up', 'One thing I have desired', 'Unto Thee, O Lord', and others of like kind. He wrote a book of considerable length, forty-three close folio columns of print, *On the Use of the Psalms*,¹ with the heading

Hoc opus hoc carmen quod cernis tramite lector
Alcuinus Domini fecit honore sui.

He states first nine special uses of psalms, and then proceeds to give seventeen selections, with Versus to be sung after each, and Oratio. In a second part he provides fifteen similar courses for personal chanting.

The directness of the influence of England upon the psalmody of the whole Frank Empire is emphasized in a very interesting manner by a statement in one of his many utterances on this special musical part of the services of religious worship. Writing to Arno, archbishop of Salzburg, after the year 798, he informs him of the dispatch of a little handbook containing much on divers matters, namely, short expositions of the seven penitential psalms, of the 118th psalm [our 119], and of the fifteen psalms of degrees. In the little handbook, he continues, is a small psalter, called the psalter of the blessed presbyter Beda, which Beda put together with sweet verses in praise of God, and prayers from the several psalms, and very beautiful hymns, and one specially noble hymn on Queen Etheldreda.² Thus through our own Alcuin our own Bede taught and sang to Austrasians and Neustrians alike, and England profoundly influenced the choral parts of the services of the Mass. And who can say how much of the fundamental position of the Psalms in the religious phraseology and the religious thought of our own race is due to the constant work of Alcuin and of Bede eleven and a half and twelve centuries ago?

The learned and skilful editors of the modern edition of Dr. Rock's *Church of our Fathers*, G. W. Hart and W. H. Frere, have found an interesting and important evidence of Alcuin's great work in connexion with the hymnal parts of the service of the Mass.³ This evidence is afforded by a manuscript of the life of Pope Adrian II, formerly in the Bibliothèque du Roi in Paris. It contains passages which are not found in the Vatican or other MSS. of the *Liber Pontificalis*. The part which refers to Alcuin gives the following facts:

Pope Adrian II, 867-72, ordered that at the chief mass on the greater festivals not only must they sing the hymns which they call 'Lauds' in the course of the angelic hymn *Gloria in excelsis Deo*, but in the psalms which they call

¹ Migne, *P. L.* c1, col. 465.

² This codex, with a full description of its contents, and an assignment to Bede of all the parts which follow the mention of his name, has been found in the cathedral church of Cologne, cod. 106.

³ *Church of our Fathers*, iv, 25.

'Introits' they must sing the inserted canticles which the Romans call 'Festal Lauds' and the French call 'Tropes'. He ordered also the melodies before the Gospel to be sung which they call Sequences because the Gospel follows them [!]. The Lord Pope Gregory in the first instance, and afterwards Pope Adrian I in concert with Alcuin, a man of delicate taste, the abbot of the great Emperor Charles, had provided and arranged these sacred hymns, in which the said emperor took great delight. The negligence of chanters had suffered them to fall into disuse, but Adrian II restored them, to the praise and glory of God.

Further, Adrian II corrected the Roman Antiphoner, as Adrian I and Alcuin had done, and he retained as a preface the hexameter lines which Adrian I had used for that purpose. We may fairly suppose from their style that Alcuin wrote them, as indeed Dr. Rock himself, to whom this evidence was unknown, had suggested as a calculated guess. They begin with an ascription of praise to the traditional author of much of the material:

Gregorius praesul meritis et nomine dignus.

These verses Adrian II extended.

In his old age Alcuin desired to retire to Fulda and there end his days, from his love for his fellow countryman the martyred Archbishop of Mainz. The Emperor Charlemagne did not allow him to carry out this wish, and Alcuin wrote a long and affectionate letter to the monks of Fulda in 801-2. The letter is Ep. 186. In the course of this touching letter he turns to the priests of the monastery:

To you, O most holy presbyters, I have sent a little collection of words for the Mass, to be used on various days on which any one desires to offer prayers to God, whether in honour of the Holy Trinity, or in love of wisdom, or in tears of penitence, or in perfect love, or asking for angelic support, or in address to any one of all the saints; or if any one wish to offer prayers for his own sins, or for any living friend, or for many friends, or for brothers departing this life; or especially when one wishes to invoke the intercessions of blessed Mary, mother of God, ever virgin, or when one desires to chant and invoke by his prayers the most pious presence of the most holy Boniface your father.

A visit to the British Museum and a study of the Mainz Troper dated 967-72, with the

Quam splendida polo stella
maris rutilat,

makes one feel that it was just such a *cartula* as Alcuin sent, so far as the hymnal parts were concerned, and that the seat of Boniface's archbishopric of Mainz was the natural home for a collection of Alcuin's choral additions to the service of the Mass, considering the afflictions which befell Fulda. His words make it clear

that such was the character of his *cartula*; and we know enough of him to feel sure that what he wrote, other than apposite quotation of verses of psalms, was rhythmic.

To the monks of St. Vaast (Vedast) he sent something apparently more complete:

I send also certain Masses taken from our Missal for daily offices or days of ecclesiastical custom. First, in honour of the highest Trinity, then for invoking the intercessions of Saints, and for begging the help of angels, very necessary for those labouring in this pilgrimage. I have further added a Mass of the holy mother of God and ever Virgin Mary, to be sung for some days if any one so desires.

The editors of Dr. Rock describe¹ the *cartula missalis* sent to Fulda as a 'list of masses'. I have preferred to render it 'a little collection of words for the Mass'. It is certainly more than a mere list of masses. It seems clear that in both of these letters, to each of which the editors apply the description 'a list of masses', Alcuin was furnishing the regular course of the Mass with special features, besides creating additional masses.

There is little doubt that we have in Alcuin's *Liber Sacramentorum* the *cartula* which he sent to the monks of St. Vaast. It begins with the details for a Mass of the Holy Trinity, the Oratio, Secreta, Praefatio, Postcommunio, Alia Postcommunio, and a Lectio and Sequentia for Epistle and Gospel. It proceeds with the details for numerous special masses, including the Mass *ad postulanda angelica suffragia* which he mentions under that exact title in his letter to Fulda, and as *ad angelorum suffragia postulanda* in his letter to St. Vaast. It includes also other masses named in the fuller letter to Fulda; and also, in the order named in the letter to St. Vaast, the details of the Mass of the holy Mary, which he assigns to the dies Sabbati, a custom, I am told, still observed. In all, the *Liber Sacramentorum* gives the details of twenty-six masses, with an Appendix containing Benedictiones, Collecta, and Orationes.

Special attention should be called to one main feature of the influence of the Church of the English, *Anglorum Ecclesia* in St. Gregory's phrase, upon the Churches of Charlemagne's empire. The emperor claimed that he had introduced the Roman use into all parts of his vast dominions. What he in fact introduced was the English use. John, the arch-chanter of St. Peter's and abbot of St. Martin's at Rome, had been lent to Benedict Biscop to teach in Northumbria the correct Roman method of chanting the services. Bede learned it perfectly from him, and Alcuin was brought up in it at York. Alcuin's influence with Charlemagne caused it to become the rule of the Frankish Empire. It is a charming coincidence that when John the Arch-

¹ *Church of our Fathers*, i, 63.

chanter died, on his way homewards after teaching chanting in England, his friends took his body to Tours and buried him at St. Martin's because of his old allegiance to St. Martin. Thus Alcuin, who had spread the results of John's teaching all over Francia, became in his old age the custodian of his remains in that pleasant home at Tours.

The assertion of Alcuin's wide and detailed influence on the services of the Church is strengthened by the acknowledged fact that he was versed in secular song also. We learn from one of his letters to Karl in 798, no. 100 in Wattenbach and Dümmler's *Monumenta Alcuiniana*, written about the middle of July of that year, that the king, not as yet emperor, had asked him to write some songs for his soldiers. It is really calamitous that Karl's letter of request is not extant. He was at that time involved in a serious war. His legates had been seized by the Saxons in the north, and some of them had been slain. He started from Herstal, and devastated the whole of Saxony between the Elbe and the Weser. Two of his dukes dealt with the original movers of revolt, of whom thousands were slain. Those campaigns against the Saxons were among the chief anxieties of Karl. It would have been of extreme interest to know the actual words in which this great captain, at a great crisis, stated his views as to what would be helpful to the soldiery in the strain of invasion of a barbarous country. We can gather the substance from Alcuin's reply, and it is of singular interest in this time of a world-wide war:

Your letter asks me to mingle the sweet melody of versification with the horrible crash of arms and the rough blasts of the war trumpets, in order that the ferocious passions of the soldiers' minds may be soothed by something of the suave melody of music. Though your own mind remains ever nobly stable, ever undisturbed, you desire that the savagery of your soldiery be mitigated by the sweetness of song.

Your prevision is most wise. It often happens that wholesome counsel has no effect on the asperity of an angry mind; while on the other hand accustomed ease weakens the vigour of the mind. Between these two kinds of disease the prudent temperament holds a middle course; mitigating fury, and rousing sloth. That is the royal road.

Curiously enough, Alcuin does not proceed to say that while music has charms to soothe the savage it has great military power to stir up the slack and brighten the weary. It seems evident that Karl's request was solely for songs that should tend to abate the savagery of his troops, when inflicting punishment on the revolted enemy. Alcuin concludes this part of a long and interesting letter in these words, 'if the Alcuin pipe can do aught to soothe fierce minds, your wish shall be carried out as far as may be, with the utmost solicitude'.

It is well known that Alcuin's liveliness of wit and skill in poetry and in song made many a dark night pass pleasantly in Karl's palace halls, and had a large

share in the influence for good which Alcuin's personality exercised upon the Frankish monarch. The school song already quoted notes this among the gifts which England gave to Francia in the person of its head master :

Scripturas sacras et liturgiam
Correctas reddidit per Franciam ;
Versu iocis cantu palatium
Mulcens, et ipsum magnum Carolum.

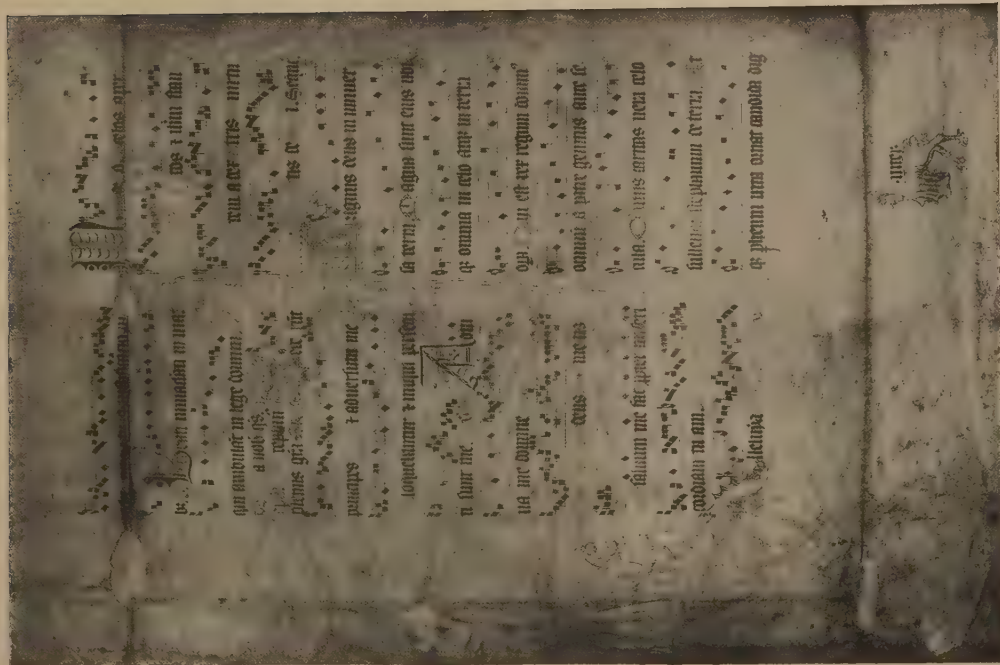
Looking at this lighter side of Alcuin's complex personality, we see in him, more than in any one else of whom we know much in the restoration of literary culture in Europe, the probable originator of the long series of Goliard songs. The traditional beginnings of the Goliards are bound up with churchmen and emperors, with archbishops and canons. Each tradition has its source in an Archipoeta. It is not unnatural to imagine that Master Hugh of Orleans and Salimbene's Primas were re-incarnations of the Archipoeta Alcuin.

Then again, Alcuin does not stand alone or first as an Englishman in this connexion. It should be borne in mind that my predecessor at Malmesbury, St. Aldhelm, who died in 709, a generation before Alcuin was born, had gifts of versification and wit similar to those of Alcuin, and that Aldhelm, like Alcuin, could set his verse to music, and sing his own songs to his own tunes. That Aldhelm's songs, sung by him in disguise on the bridge of Malmesbury, began in joviality and ended in Scripture story and persuasion to reverence and worship, we know. But he could write and sing popular songs too, with words and tunes so taking, that King Alfred, who came of the same royal stock as Aldhelm, told of him two hundred years later that one of his street songs was still sung by the people ; for anything we know it was sung on to the time of the Normans, and may be being sung in country places still. Alcuin quotes freely from Aldhelm's verses, and we may take it that the West Saxon Aldhelm was the Archipoeta of the Northumbrian Alcuin.

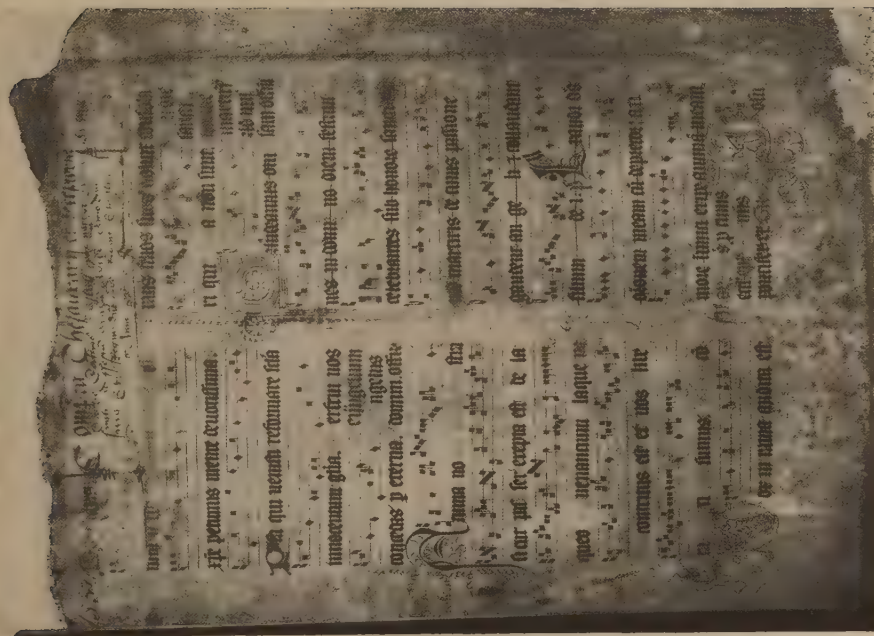
One further suggestion, of a cognate character, in connexion with some remarks on the origin of students' Latin songs.

A large part of Alcuin's life having been spent in the training of students, we may feel sure that he used his gift for pleasing and witty song in the interests of his student charges. No one is more likely than Alcuin to have set the fashion of students' songs, with taking refrains and hearty choruses ; more grave perhaps, but not less joyous and helpful in the dark nights, than the merry songs and roaring choruses of Charlemagne's palace and camp. Alike in court and students' cloister we may be sure that Alcuin taught men to sing

GAUDEAMUS IGITUR.



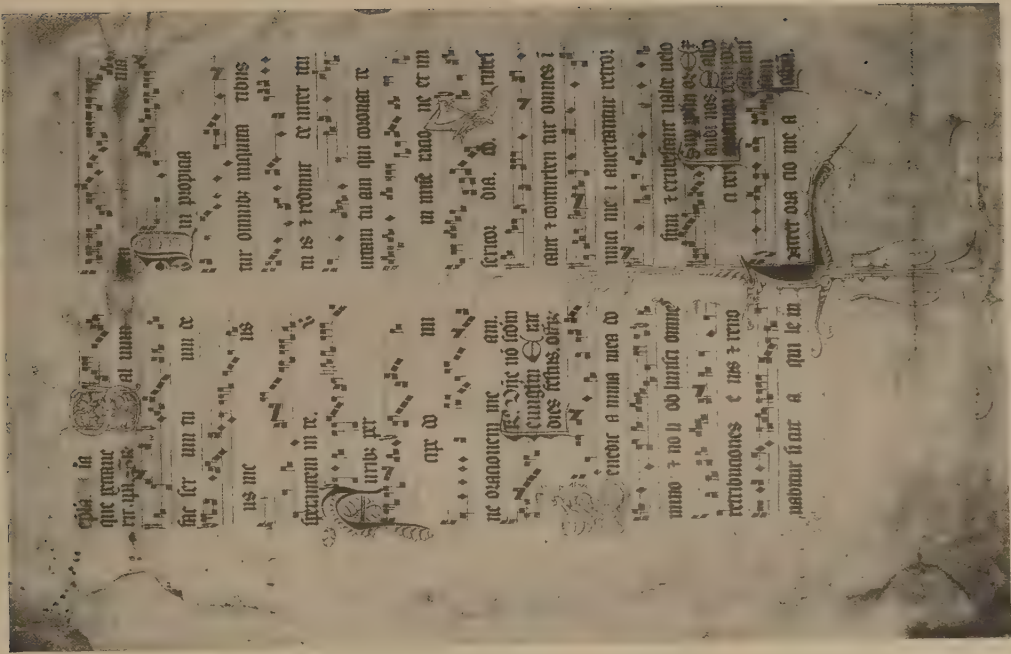
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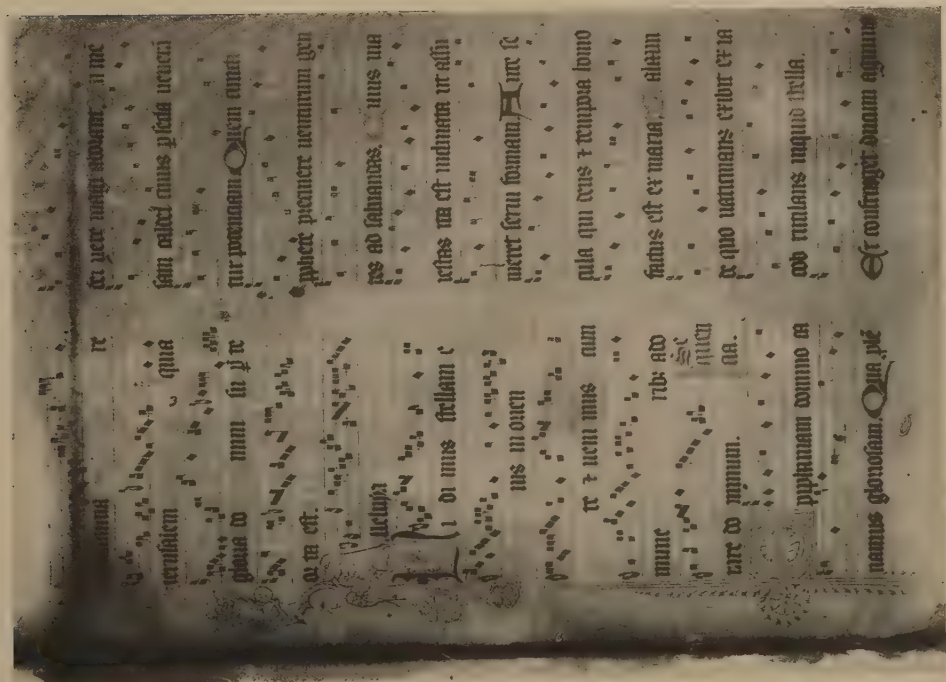
LEAVES FROM A FOURTEENTH-CENTURY TEMPORALE (pages 4 and 5)

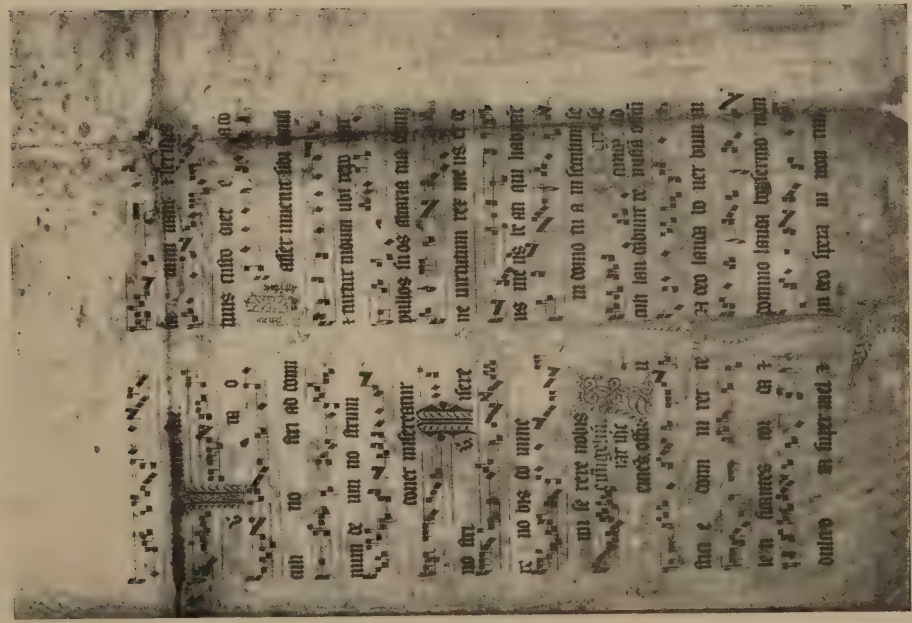
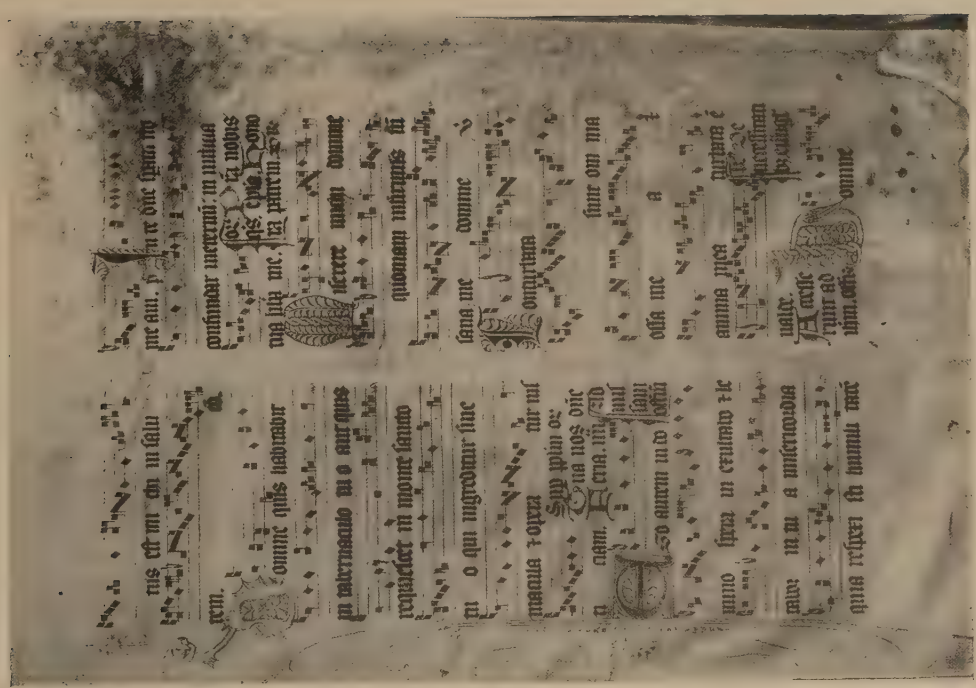
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LEAVES FROM A FOURTEENTH-CENTURY TEMPORALE (pages 9 and 14)

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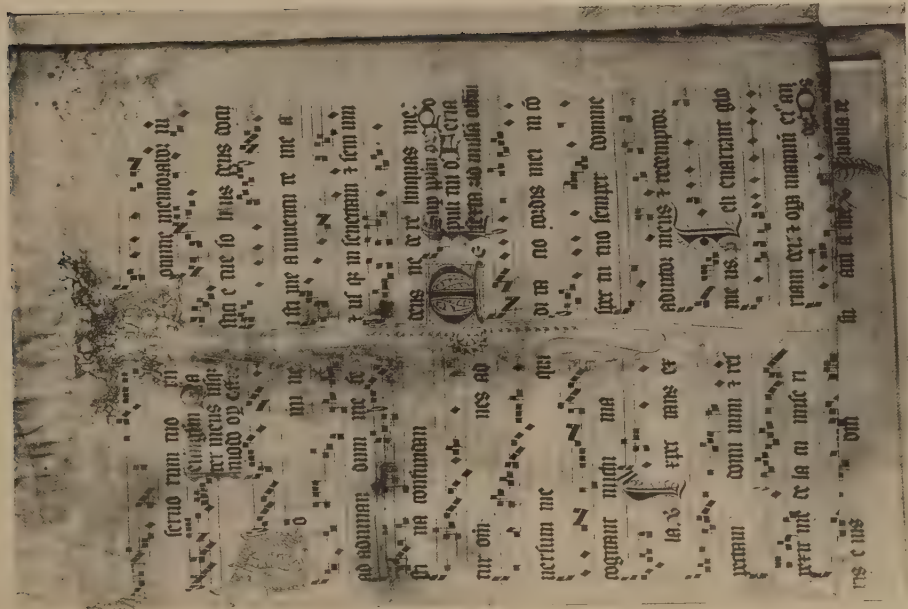


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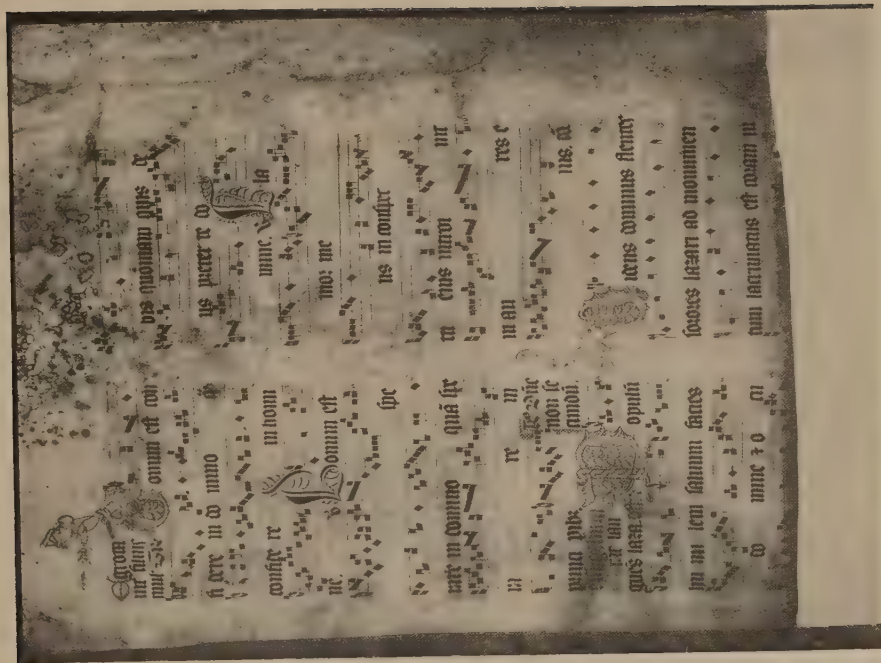
LEAVES FROM A FOURTEENTH-CENTURY TEMPORALE (pages 19 and 23)

Published by the Society of Antiquaries of London, 1917



I

LEAVES FROM A FOURTEENTH-CENTURY TEMPORALE (pages 28 and 29)



2

VII.—*General William Roy and his 'Military Antiquities of the Romans in North Britain'.* By GEORGE MACDONALD, Esq., C.B., F.B.A., LL.D., a Local Secretary for Scotland.

Read 14th June 1917.

MORE than a hundred and twenty years ago the Society of Antiquaries of London conferred a great and lasting obligation on students of the history of Scotland during the Roman period. At its own charges, and without reasonable hope of pecuniary return, it published in a splendid folio the manuscripts and drawings that had been handed over to it by the executors of Major-General Roy. The pomp and circumstance surrounding the issue immediately secured for *The Military Antiquities of the Romans in North Britain* the place which it has ever since held in public esteem—a place to which, upon the whole, its intrinsic merits fairly entitle it. Roy was at once a zealous antiquary and a shrewd and capable observer, with a thorough knowledge of military engineering. It is true that the data on which his main thesis rests were too slight to support the elaborate superstructure of which they were made the basis. It is true also that his treatment of a large part of his subject was vitiated by his seemingly implicit belief in the genuineness of Bertram's egregious hoax, the *De Situ Britanniae*.¹ Still, when every allowance has been made for the defects that inevitably resulted, his book remains one of our archaeological classics. As a storehouse of trustworthy topographical information regarding Roman sites, it can never be entirely superseded.

The permanent value which it possesses is due mainly to its careful plans, which preserve for us the outline of numerous entrenchments long since grievously mutilated or altogether destroyed. The text, on the other hand, is but seldom referred to. And, indeed, it might at first sight appear that it has little to teach us, save a respect for the author's modesty and fairness of mind, and for the scientific spirit in which he confronts the problems that he sets himself

¹ Only in one passage is there any hint of a doubt. This is in *Mil. Ant.*, p. 134, where he says that a certain discrepancy is "rather unlucky, as seeming to lessen the dependance we were willing to place on the supposed genuineness of these ancient fragments".

to solve. Some of the chapters are so permeated by the pernicious influence of the *De Situ Britanniae* that it seems sheer waste of time to read them. Others are wholly occupied by more or less speculative calculations regarding the number of troops of various kinds that could be accommodated within a given area, discussions of those 'rules of castrametation' that loomed so large on the mental horizon of eighteenth-century antiquaries. There is far less in the way of actual description of sites than a more modern treatise of similar character might be expected to contain, doubtless because Roy, as a skilled draughtsman, felt that for such purposes it was safer to trust to his pencil than to his pen.¹

Here his judgement was probably sound. At all events, the bulk of the drawings were finished first, and form a *corpus* which might quite fairly be regarded as a thing by itself; only a few of them were specially designed to illustrate the text. The latter is, in the main, of the nature of an afterthought. Nevertheless it would be a mistake to ignore it. Carefully studied, it throws an interesting light on the circumstances in which the plans of camps were made, and so helps substantially towards their proper understanding. During the course of a recent re-reading, certain points that had previously been noted as trifling inconsistencies were found to assume an importance which suggested that the Editorial Committee had performed their task conscientiously indeed, but without any grasp of the subject-matter and therefore in a more or less mechanical fashion. Further investigation seemed desirable. The two copies of the manuscript which the Committee mention are still in existence—one in the Society's Library and the other in the British Museum. Thanks to the courtesy and kindness of the responsible officials,² it proved possible not only to examine them both, but to place them side by side for the sake of convenient and more thorough comparison. The scrutiny was illuminating. The number of new facts revealed exceeded anticipation. Taken along with other material, they enable the story of Roy's activities in the sphere of Roman studies to be reconstructed with some approach to completeness. This is what I propose to attempt now, reserving the details of the collation for an Appendix. Incidentally, there will be occasion here and there to supplement or, it may be, to correct the various notices of Roy's career that have hitherto been published. We shall find that even the fullest and best of these—the sketch by the late Colonel

¹ Thus, after referring to his plate of the Antonine Wall and its stations, he says that "a short description may suffice, since from a plan of this kind, topographically expressed, a much truer notion may be obtained of the isthmus in general, of every essential particular relating to the wall, and of the military reasons by which the Romans were governed in conducting this boundary of their empire, than what, without such assistance, could possibly be conveyed in many words" (*Mil. Ant.*, pp. 155 f.).

² Mr. C. R. Peers and Mr. H. S. Kingsford of the Society of Antiquaries, and Mr. G. F. Hill and Mr. D. T. B. Wood of the British Museum, have helped me not only in this but in many other ways.

Vetch, C.B., in the *Dictionary of National Biography*—is not wholly free from serious blemishes.

William Roy was a native of Carluke in Lanarkshire. The parish records¹ show that his parents—John Roy of Miltonhead, factor or land-steward to Sir William Gordon of Milton, and Mary Stewart—were married in July 1722, and that he himself was born on 4th May 1726. He had two sisters, Grizel and Susanna, born in 1723 and 1728 respectively, and one brother, James, born in 1730. The two lads are said to have received the beginnings of their education at the parish school of Carluke, afterwards proceeding to the grammar-school of Lanark,² where we may suppose that they were soundly drilled in the rudiments of Latin and mathematics. James matriculated at the University of Glasgow in 1742—in those days twelve was a common enough age for entry upon undergraduate life in Scotland—and took his Master's degree five years later. He ultimately entered the Church, dying in 1767 as minister of Prestonpans in East Lothian.³ As to the earlier stages of William's after-school life, nothing definite seems to be known. But, when we next catch sight of him, he comes clearly into view as one of the central figures in an enterprise that was destined to influence his whole future most profoundly. In the obituary notice which appeared in the *Gentleman's Magazine* immediately after his death in July 1790, there occurs the following passage:

“While colonel of artillery, he and his engineers, under Col. Watson, in the winter of 1746, made an actual survey of Scotland, which goes under the name of the Duke of Cumberland's Map, on a very large scale, most accurately pointing out every the [*sic*] smallest spot, with the Roman camps, &c., the original of which is in the Ordnance-office.”⁴

The date, as we shall see presently, is wrong, and the description of the map claims for it a completeness to which Roy himself would never have pretended. But the most astonishing blunder, frequently repeated by subsequent biographers, is the statement that in 1746 the future general, who was then a stripling of twenty and who was never at any time of his life in the gunners, was already a colonel of artillery.⁵ In 1810 a very different account of the matter

¹ Now preserved in the General Register House, Edinburgh, where I have had an opportunity of consulting them.

² *Proc. Soc. Ant. Scot.*, i, p. 148.

³ W. Innes Addison, *Matriculation Albums of the Univ. of Glasgow*, p. 29, no. 991.

⁴ *Op. cit.*, vol. lx, p. 670.

⁵ Attention was first drawn to the mistake by Mr. D. R. Rankin in *Proc. Soc. Ant. Scot.*, ix, p. 564. It may be of interest to supplement Mr. Rankin's correction by indicating the source of the error. The writer in the *Gentleman's Magazine* was merely copying, in a singularly unintelligent way, a notice which had appeared in Roy's own lifetime in Gough's *British Topography* (1780), Roy being then a

was given to the world by George Chalmers in the second volume of his *Caledonia*.¹ To a paragraph which opens with the assertion that "in speaking of those surveys more is commonly attributed to the scientific labours of the late Major-General William Roy than accurate inquiry will fully warrant", there is appended this characteristic foot-note:

"In 1747, when those surveys began, William Roy left the post-office at Edinburgh, when he was about the age of one and twenty. He now acted for some time as clerk to Lieutenant-Colonel Watson, who, from the recommendation of M. Gen. Napier to the Duke of Cumberland, was employed as superintendent of the whole survey. Roy, after a while, joined the surveying engineers, under the patronage of Colonel Watson; and, from his predetermination of mind and habitual application, he became an excellent surveyor and an admirable draughtsman. He never was admitted into the Royal Academy at Woolwich as a gentleman cadet, nor was he ever of the drawing-room in the Tower; but he was probably adopted as a *practitioner* in the new establishment of the engineer department, dated the 11th April, 1748.² In March, 1759, he was merely a sub-engineer, with the rank of lieutenant. He remarkably distinguished himself at the battle of Thornhausen, on the 1st of August, 1759. The praise of Prince Ferdinand, the illustrious commander of the allied army, supported Roy throughout his whole service. He soon became captain of engineers and major. He was made deputy quarter-master in 1762, with the rank of lieutenant-colonel in the army. The peace of Paris immediately ensued, when Colonel Roy returned to his *Roman Antiquities*. In 1764, 1769, and in 1771, he appears to have employed much time in these interesting pursuits. In 1774 he constructed, with the help of those surveys, his 'Mappa Britanniae septentrionalis Faciei Romanae', which was drawn by Thomas Chamberlain, the skilful draughtsman of the Tower drawing-room. In 1778, Colonel Roy was appointed commissary general of the whole army, and in 1786, when major-general, he was promoted to the command of the 30th regiment. He died, after two hours' illness, on the 1st of July, 1790, leaving his great work on the Roman Antiquities of Great Britain to the Antiquary Society of London, who published his ingenious labours with more splendour than accuracy. . . . His Roman Antiquities show how little he was acquainted with the Roman localities of North-Britain, but in his antiquarian speculations his sagacity was constantly over-ruled by his system."

colonel in the army and a captain of engineers. The passage (*op. cit.*, ii, p. 585), which is quoted in full *infra*, p. 203, shows that Gough was responsible for the mistake in the date and for the undue glorification of the map, as well as for connecting Roy with the artillery.

¹ p. 64. In the edition of 1888 it is, of course, vol. iii.

² On p. 61 Chalmers had quoted the records of the Privy Council to show that on the date mentioned the Board of Ordnance had represented to the king "the great difficulty of getting proper persons to act as engineers; that the whole establishment of engineers consisted only of 29, of whom 4 were appointed to carry on the works in Scotland". The king immediately approved of an addition to the establishment of six sub-engineers and ten 'practitioners' or probationers.

Those who are familiar with the looseness of Chalmers's own work will find it difficult to have patience with this ungenerous attack upon Roy's memory. And, indeed, it does not deserve detailed discussion. Suffice it to say that an analysis of it would show it to be as rich in inaccuracies as it is in innuendo. So far as these affect the aspect of Roy's life in which we are more immediately interested, the necessary corrections will be supplied as we proceed. In the meantime it will be convenient to begin by recording the facts as to his connexion with the Scottish survey. Fortunately this can be done in his own words:

"The rise and progress of the rebellion which broke out in the Highlands of Scotland in 1745, and which was finally suppressed, by his Royal Highness the late Duke of Cumberland, at the battle of Culloden in the following year, convinced Government of what infinite importance it would be to the State, that a country, so very inaccessible by nature, should be thoroughly explored and laid open, by establishing military posts in its inmost recesses, and carrying roads of communication to its remotest parts. With a view to the commencement of arrangements of this sort, a body of infantry was encamped at Fort Augustus in 1747, under the command of the late Lord BLAKENEY, at that time a Major-General; at which camp my much respected friend, the late Lieutenant-General WATSON, then Deputy Quarter-Master-General in North Britain, was officially employed. This officer, being himself an engineer, active and indefatigable, a zealous promoter of every useful undertaking, and the warm and steady friend of the industrious, first conceived the idea of making a map of the Highlands. As assistant Quarter-Master, it fell to my lot to begin, and afterwards to have a considerable share in, the execution of that map; which being undertaken under the auspices of the Duke of CUMBERLAND, and meant at first to be confined to the Highlands only, was nevertheless at last extended to the Lowlands; and thus made general in what related to the mainland of Scotland, the islands (excepting some lesser ones near the coast) not having been surveyed."

This version of the story may without hesitation be accepted as authentic. It is taken from the Introduction to a highly important paper, entitled 'An Account of the Measurement of a Base on Hounslow-Heath', which Roy read before the Royal Society in 1785, and which was published in the same year in the Society's *Philosophical Transactions*.¹ From it we learn that the idea of constructing a map originated with Watson, and that Roy, so far from joining "after a while", was closely identified with the enterprise from its inception. Thanks mainly to Chalmers, whose official connexion with the Privy Council gave him access to much miscellaneous information, we know the names of various other helpers.² Their whole number was small, but their average of

¹ The extract quoted above will be found on pp. 385 f. (vol. lxxv).

² *Caledonia*, ii (iii), p. 62.

ability must have been uncommonly high. The principal draughtsman, for example, was Paul Sandby, afterwards one of the foundation members of the Royal Academy, whose popular reputation to-day perhaps rests chiefly on his series of etchings of 'The Cries of London'. Again, of the ten assistant engineers whom Chalmers mentions by name, at least four ultimately rose, like their chief, to be general officers. One of these, of course, was Roy. The most distinguished was David Dundas,¹ who before his death attained the rank of Commander-in-Chief of the British army, and was considered "the most profound tactician in England".² We shall hear of him later. In the meantime it will be enough to note that he was a nephew of Watson,³ that he was nine years younger than Roy, and that he did not become associated with the survey of Scotland until 1752.

The results of the labours of Watson and his party were embodied in the sheets that form the so-called Duke of Cumberland's map, now preserved in the British Museum. Examination shows that besides the islands (which were never surveyed at all) some considerable sections of the southern part of the mainland are wanting. It hardly seems likely that the gaps are due to accidental loss. A simpler explanation is that progress was rudely interrupted by the advent of the Seven Years' War, before the whole of the material accumulated in the field could be subjected to the final process of protraction.⁴ Roy's testimony on this point is important:

"Although this work, which is still in manuscript, and in an unfinished state, possesses considerable merit, and perfectly answered the purpose for which it was originally intended; yet, having been carried on with instruments of the common, or even inferior kind, and the sum annually allowed for it being inadequate to the execution of so great a design in the best manner, it is rather to be considered as a magnificent military sketch, than a very accurate map of a country. It would, however, have been completed, and many of its imperfections no doubt remedied; but the breaking out of the war of 1755 prevented both, by furnishing service of other kind for those who had been employed upon it."

The extract just quoted is the immediate continuation of the passage already cited from the *Philosophical Transactions*,⁵ and the criticism implied in the first sentence therefore proceeds from Roy the scientific geographer and geodesist rather than from Roy the professional soldier and antiquary. But Roy the

¹ The other two were Hugh Debbieg and George Morrison.

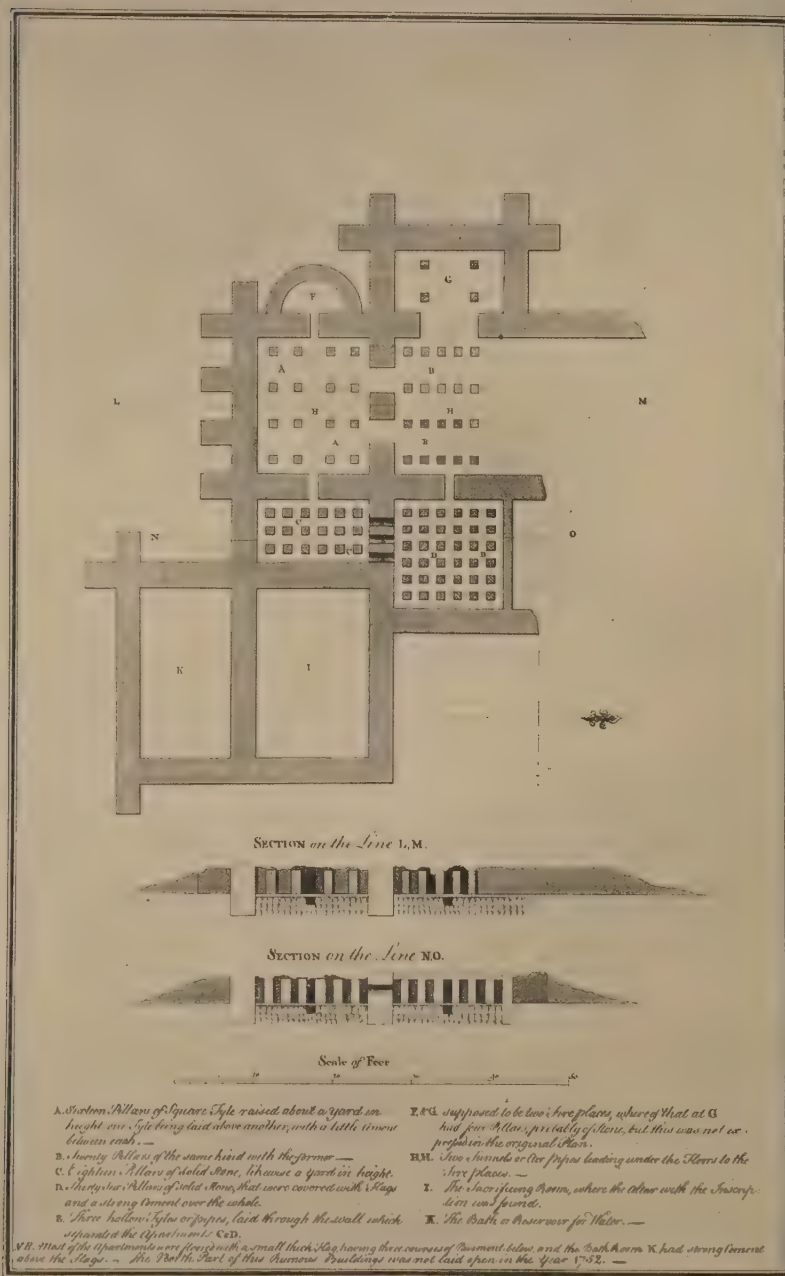
² H. Morse Stephens in *Dict. Nat. Biogr.*, xvi, p. 183.

³ Through an obvious confusion, Porter's *History of the Corps of the Royal Engineers*, vol. ii (London, 1889), speaks of Roy as having been Watson's nephew (p. 229).

⁴ It is the large-scale protractions that are lacking. The reduced maps are more complete.

⁵ Vol. lxxv, pp. 386 f.

PLAN and SECTIONS of a ROMAN BATH discovered in 1732 near the
STATION at NETHERBY on the RIVER ESK.



REVISED PLAN OF THE NETHERBY BATH

From the British Museum MS.

student of Roman Britain was equally frank as to the limitations of the great map from the archaeological point of view. Speaking of the survey in the 'Prefatory Introduction' to his *Military Antiquities*,¹ he commits himself only so far as to say that "though at that early period, the study of Antiquity was but little the object of the young people employed in that service, yet it was not wholly neglected". It certainly was not, so far as Roy himself was concerned. Long before he experienced the special stimulus to be mentioned presently, he proved conclusively that he had the root of the matter in him. In 1752, when the neighbourhood of the river Esk was being surveyed, he heard the story of how the remains of a very fine bath had been discovered twenty years earlier on the site of the Roman station at Netherby. In the interval all traces of the discovery had been swept away. But Roy was so keenly interested that he determined to secure a proper record for himself. After pointing out that it was impossible to take any plan of what no longer existed, he proceeds:

"The plan here referred to was therefore copied from an original drawing, in the possession of the clergyman of Kirk Andrews, situated on the opposite side of the Esk from Netherby; who had taken care, while the workmen were employed in freeing the foundations from the surrounding rubbish, to measure the several parts of the building accurately, whereby its true figure and dimensions were preserved. No sections were, however, annexed to the original; so that these, which now accompany it, were done from description only, with the view of showing more clearly the method the Romans made use of in constructing buildings of this sort."²

Apart from the evidence it supplies as to Roy's natural bent towards archaeology, the explanation is useful as enabling us to assign a definite date to plate xlvi of the *Military Antiquities*, on which the plan of the bath at Netherby (pl. XXVII³) appears. What is more important, the fact that in 1752 he was engaged in surveying the valley of the Esk not only justifies us in attributing to this year the 'Plan and sections of Castle-over in Eskdale-moor', reproduced as plate xxvi, but also opens the way to a further inference. It will be remembered that a survey of Southern Scotland formed no part of Watson's original scheme; the decision to include it was arrived at later. Now the *Military Antiquities* states incidentally that the Cheviots and the country to the north of them were likewise being surveyed in 1752, but that Roy had no hand in the work.⁴ This can hardly be a mere coincidence. Apparently what

¹ p. iv.

² *Mil. Ant.*, p. 197.

³ The illustration is reproduced from the British Museum MS., and presents some marked differences from the plate as published: see *infra*, p. 228.

⁴ Thus *Mil. Ant.*, p. 116, says that "In surveying the line of the border, in 1752, the intrenchments at Chew-green, on the head of Coquet, those at Woden Law, and likewise the tract of the Watling-street, between them, had been taken notice of in the usual way". On the other hand, in

happened was that, in dealing with Southern Scotland, the surveyors divided themselves into two parties, an eastern one and a western, the latter headed (we may suppose) by Roy. On this hypothesis other parts of our puzzle fall readily into their places.

The language which Roy uses in speaking of the Roman road between Chew Green and the Eildons¹ plainly suggests that in the east the surveying party worked from south to north. A similar arrangement would seem to have been followed in the west, for there the surveyors were unquestionably busy in Lanarkshire in the year immediately succeeding that in which the plan of the Netherby bath was drawn. The 'Plan of the Roman station called Castledykes near Carstairs', which is reproduced on plate xxvii, actually bears the date '1753'. Certain others may therefore be confidently placed in the interval between Netherby and Castledykes. These are the 'Plan and sections of Liddel Moat, a Roman post, near the junction of the rivers Liddel and Esk' (plate xxiii), the 'Plan and view of Wood castle, a Roman post near Lochmaben in Annandale' (plate viii), the 'Plans and sections of Birrenswark-hill in Annandale, with the Roman camps, &c. belonging to it' (plate xvi), and the 'Plan and section of the station at Birrens, near Middleby in Annandale' (plate xxiv). What seem to be the original sketches for the last two of these are in the King's Library; they are unsigned, but the style and technique mark them out unmistakably as Roy's.² And there are still two which not improbably belong to the same period or to the year immediately succeeding,—the 'Plan of the Roman station at Line-kirk, on the river Line in Tweeddale' (plate xxviii), and the 'Plan of Tibbers Castle, supposed to have been a Roman camp' (plate xlix). Tibbers Castle, which stood on the banks of the Nith, would naturally fall within the purview of the western surveying party. Lyne, on the other hand, lay so far to the east that it may well have been dealt with by their colleagues; and in this connexion it is not without significance that, of all the plans in the

a foot-note on p. 117 Roy expressly disclaims responsibility for the plan of Chew Green as "not having been taken by the author himself", and goes on to hint a doubt as to its accuracy. Evidently he had no great confidence in the archaeological competence of those of his colleagues who were concerned; speaking of their work on p. 116 he says frankly that "antiquities of this kind were not very particularly attended to".

¹ *Mil. Ant.*, p. 116.

² The reference numbers are xlix, 54. 2 (Birrens) and 3 (Birrenswark); see *Catalogue of the Manuscript Maps, etc., in the British Museum*, (1844) ii, p. 343. The latter agrees exactly with the plan on plate xvi of *Mil. Ant.* The former is on a slightly smaller scale than the plan on plate xxiv, and there are a few unimportant differences in the representation of the interior; otherwise the correspondence is complete. It is interesting to note that the title of the original sketch employs the spelling 'Burnswark', which is undoubtedly the correct form. The variant 'Birrenswark' seems to be a later invention of Roy's own, suggested apparently by the analogy of Birrens, and from this came the now generally used 'Birrenswark'.

Military Antiquities whose accuracy has been tested by excavation, the plan of the fort at Lyne seems to be by far the least satisfactory.¹

The summer of 1754 appears to have been spent by Watson and his assistants in completing their survey of Southern and Eastern Scotland. In the autumn they returned as usual to their head-quarters in Edinburgh, to collate their observations and transfer to paper the combined results of their field-work. At this juncture a new trend was unexpectedly given to Roy's antiquarian researches. The impulse came from one of the most remarkable Scotsmen of his generation, Lieutenant-General Robert Melville,² then a captain in the Edinburgh Regiment or King's Own Borderers, originally the Twenty-fifth Foot. In 1751 Melville had been in Edinburgh, on a recruiting mission for his regiment which was stationed in Ireland, and had visited Sir John Clerk's house at Penicuik, doubtless with an introduction from Clerk's youngest son, Matthew, who was one of his brother officers.³ The sight of Sir John's Roman collection kindled Melville's imagination, and set him wondering and thinking about "the Roman art of war by sea and land". In 1754 he was once more in Scotland, when a walking-tour undertaken from Edinburgh in company with two of Sir John Clerk's sons⁴ led him first along the line of the Roman Wall to the Clyde and next through the Highlands to Fort William, whence he crossed to Fort George and made his way southwards again by Montrose, Angus, and Perthshire. To his deep disappointment he had been unable, after leaving the Wall, to discover almost "any remains of works which could be concluded to be certainly Roman". Accordingly, after his return to Edinburgh, he betook himself to an "attentive perusal" of the *Agricola* of Tacitus, and "combining what relates to the two last campaigns with the nature of the country, and the REASON of WAR"—a phrase which he explains as "Reason applied to the art, or rather the science of war; for a French writer most justly observes, that WAR is a *trade* to the ignorant, but a *science* for the skilful"—he quickly made up his

¹ Dr. Christison says that it "is full of errors, and indeed is little better than that of Gordon, which it resembles in making the lines of fortification symmetrical on all sides and in misplacing the *Portae Principales*" (*Proc. Soc. Ant. Scot.*, vol. xxxv, p. 157). It must at the same time be admitted that the language used in *Mil. Ant.* (p. 122) seems to suggest that Roy had actually visited the spot himself at some time, whether he was the author of the plan or not.

² An interesting account of Melville's life, written by his secretary, was recently published in the *Scottish Historical Review* (vol. xiv, pp. 116-146). The episode with which we are immediately concerned is, however, only briefly mentioned there. Our information regarding it is drawn from other and even more authentic sources, to be mentioned presently.

³ Melville's visit to Edinburgh took place in the autumn. Matthew Clerk (as the manuscript Army List for 1752 in the Public Record Office shows) had received his commission as ensign in the King's Own Borderers in August 1751. He became a lieutenant four years later, and was subsequently transferred to the Engineers. He fell in the unsuccessful attack on Ticonderoga in 1758.

⁴ John Clerk of Eldin, and his younger brother, the ensign.

mind as to the route which the first Roman invaders of Scotland must have followed.

After vainly searching in Sibbald's *Historical Inquiries*, Gordon's *Itinerarium*, and "the writings of such other Scottish Antiquaries as he could meet with", for any hint of the existence of Roman camps beyond the Tay, he next made inquiry of the engineer who had just surveyed Strathmore for Watson's map. Disappointment awaited him once more. He "had the mortification to learn from him, that although he had been very desirous, according to directions received, to observe and delineate all traces whatever of intrenchments, or other military works; yet he had seen none, and indeed was positive that none did exist of a rectangular and Roman-like form". So strong, however, was Melville's conviction of the soundness of the conclusions he had reached, that he determined to put the matter to the proof of a personal investigation. He accordingly arranged to visit Lord Panmure¹ at his seat in Angus, in order that he might be able "to make enquiries and searches, especially in heaths and uncultivated places beyond it". At first the questions he put to "the many gentlemen of the county who resorted there" produced no encouraging information; he was beginning to despair of success when, just as his stay was drawing to a close, a neighbour of Lord Panmure's, who happened to be dining with him, offered a suggestion that seemed to be promising. Next day—8th August 1754—Melville set out to examine the spot indicated, Harefaulds near Forfar, "and to his great joy found, very visible, the greatest part of a *vallum* and ditch, with gates of the usual breadth of a street in a Roman camp, and each of them covered by a fit traverse or breast-work, quite observable". He was satisfied that he had now got possession of a key of the utmost value. If he followed Agricola's natural route, and made search at suitable intervals, he could hardly fail to discover other halting-places of the Roman army. As a matter of fact, in the few days still at his disposal, he lighted on three more 'temporary camps'—one at Keithick near Brechin, another at Battledykes near Finhaven, and the third at Lintrose near Cupar-Angus.

Melville's discoveries are mentioned by Roy in his 'Prefatory Introduction'.² A much fuller and more circumstantial account of them was contributed by Melville himself, in 1789, to Gough's edition of Camden's *Britannia*,³ and it is upon this, coupled with stray facts gleaned from regimental histories and the like, that the foregoing summary is based. A briefer description, contained in

¹ The friendship with Lord Panmure, like that with the Penicuik household, appears to have been originally a regimental one. Lord Panmure was colonel of the Twenty-fifth Foot when Melville was a subaltern. He had relinquished the command in 1752.

² *Mil. Ant.*, pp. v f.

³ Vol. iii, pp. 414* ff. The reference to the ed. of 1806 is vol. iv, pp. 158 ff.

a private letter of date 12th May 1788, is noteworthy chiefly for the following sentence: "Upon my return to Edin^r my first proselyte was the present Gen^r Roy, then one of the surveying Engineers, but not the one who had surveyed Angus."¹ Melville, then, was the source whence Roy's fresh inspiration was drawn. The immediate effect of his intervention can best be explained in the 'proselyte's' own words. The Roman works planned during the earlier part of the survey had been (he tells us) "of the stationary kind only"—that is, they were permanent forts or *castella*, whose remains

"being always conspicuous enough, and often exceedingly entire, could not miss to strike the eye of the most transient passenger. Not having as yet sufficiently attended to the description of the camp of a great Roman army, as given by Polybius, the author had but an imperfect notion of its figure and dimensions; neither did it occur to him that, at the distance of so many ages, the remains of works so very temporary in their nature might be found to exist; much less could he imagine, from a number of such vestiges being discovered in succession to each other, at proper distances, that the daily marches of a Roman army might thereby be traced. . . . The discovery of the camps in Strathmore having, however, been communicated to the author, he thereby found his ideas enlarged. Knowing now what a temporary Roman camp really was, he therefore (during the completion of the public business formerly alluded to,² in the following summer, 1755) employed some time in augmenting his collection, by taking exact plans of those that had been newly discovered; at the same time that a survey was made of the wall of Antoninus, and more accurate drawings of such stations as formerly had been only slightly sketched."³

This passage is important, not only as embodying Roy's confession of his new-found faith, but also as enabling us to assign to a definite date another group of his plates. To this period obviously belong his 'Plan of Agricola's camp at Battle Dykes in Strathmore, between Killymoor and Brechin' (plate xiii), and also the 'Plans of the smaller camps of Agricola in Strathmore, at Keithick, Kirkboddo, and Lintrose' (plate xiv). His 'Plan, view, and section of a British post, called the White Cather Thun, or Castrum Thuani in Strathmore' (plate xlvii) and his 'Plan and section of the Brown Cather Thun in Strathmore' (plate xlviii) almost certainly form part of the same series,⁴ although there is perhaps a bare possibility that the drawings on which these were based were not made till sixteen years later (1771), when he visited the neighbourhood again. However that may be, we are on firm ground in interpreting the allusion to "more accurate drawings of such stations as formerly had been only slightly

¹ *Proc. Soc. Ant. Scot.* vii, p. 30, where the whole letter is printed.

² This was, of course, the survey.

³ *Mil. Ant.*, pp. v f.

⁴ We are told (*Mil. Ant.*, p. 205) that they belonged to a small number of plans or sketches of "very curious British posts" made while he was "searching for, or observing" Roman camps; and they lie only 4 or 5 miles NE. of Keithick.

sketched". The reference is to the 'Plan of the Roman station Lindum, at Ardoch in Strath Allan; together with the adjoining camps of Agricola' (plate x); the 'Plan of the Roman Camp at Dealgin Ross in Strathern. . . . Shewing also the situation of Victoria, founded by that general after his battle with Galgacus' (plate xi); the 'Plan shewing the situation of Inchstuthill, formerly an island in the Tay, with the old intrenchments remaining upon it' (plate xviii); the 'Plan and sections of the Roman station Lindum, at Ardoch in Strath Allan' (plate xxx); the 'Plans and sections of some posts near Ardoch' (plate xxxi); and the 'Plan and sections of the Roman station Hierna, near Strageth, on the river Ern' (plate xxxii). In the case of Inchtuthil the published plate is actually dated '1755'. And for the others we have the evidence of the original drawings, which are still preserved in the British Museum;¹ three of them are signed in autograph 'Will. Roy', and are dated either '1755' or 'July, 1755'. The whole of the sites in Perthshire, as well as in Angus, are thus accounted for, except Grassy Walls and 'Bertha' (plate xii), of which we shall hear by and by, and 'the Roman post at Fortingaul, in Glen Lyon' (plate xix), the plan of which must be from another hand, since Roy expressly tells us that "no opportunity hath offered of examining personally its vestiges".² It should be noted that, when at Ardoch, he was able to take advantage of what he had learned from Melville in the preceding summer, and to identify the temporary camps, whose remains had been misunderstood by earlier observers, such as Gordon.

Despite the novelty attaching to this last discovery, it cannot be regarded as the most important incident of the summer of 1755. That distinction rather belongs to the systematic survey of the great barrier that once ran athwart Central Scotland, the chief fruit of which was the 'Plan shewing the course of the Roman wall called Grime's Dyke, raised along the isthmus between the Forth and the Clyde, . . . together with plans of those stations belonging to the wall, whose vestiges do yet exist' (plate xxxv). This is an extremely valuable record, preserving the track of the Wall, so far as it was visible a hundred and sixty years ago, as well as the outlines of no fewer than ten supporting forts. Among the by-products of the same survey were the 'Plan shewing the situation of the Roman station Camelon, with regard to the wall of Antoninus' (plate xxix), and the 'View of Duntocher bridge on Grime's Dyke', which appears as No. xxxvii in the 'List of Plates'. As we shall learn in due course, this particular view was never published.³ It is still in existence,

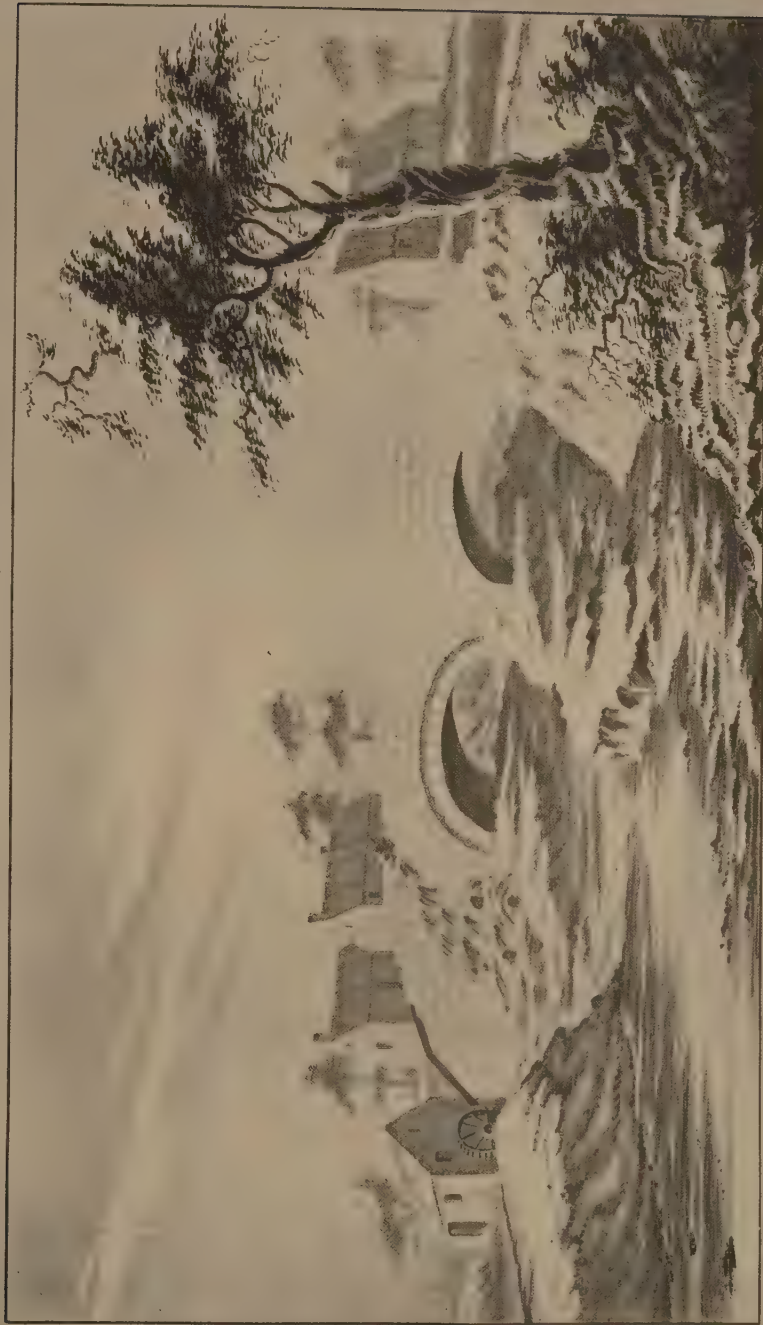
¹ They are in the King's Library, the reference numbers being l. 79, 2 a, 2 b and 3, and l. 83, 3 (*Catalogue of the Manuscript Maps, etc., in the British Museum*, ii, pp. 359 f.). They do not show Latin names like Lindum and Hierna. These are derived from Roy's subsequent study, especially of the *De Situ Britanniae*.

² *Mil. Ant.*, pp. 134 f.

³ See *infra*, p. 213.

XXVII.

View of DUNTOCHER BRIDGE on GRIME'S DYKE, 1755.



ROY'S SKETCH OF DUNTOCHER BRIDGE

From the British Museum MS.

Published by the Society of Antiquaries of London, 1917

however, and bears date '1755' (pl. XXVIII). There is no reasonable doubt as to its being from Roy's own brush, and it is certain that it was upon his initiative and under his personal supervision that the survey of the Wall was made. The general description he gives shows how thoroughly the work was done:¹

"In carrying on the general survey of Scotland begun in 1747, the wall of Antoninus was observed in the ordinary way, and accordingly inserted in the plan of the isthmus; but this, as well as every district of the country, being the allotment of work for several different people, without the wall itself becoming the principal object of the whole, or of any one of them; it was therefore judged proper, in 1755, to survey accurately the line of this old intrenchment by running a suite of stations along its whole course."²

At this time, so far as can be judged from the expressions which he uses, Roy's ambition in regard to Roman antiquities extended no farther than the formation of a collection of sketches.³ The idea of writing a book had certainly not entered his mind.⁴ The visit to Strathmore, the fresh examination of the Perthshire sites, and the thorough survey of the Wall had all been undertaken in the interests of the great map. Early in 1755, as we learn from other sources, Watson had been recalled to England, to advise as to certain measures that were being contemplated in view of a possible French invasion. Roy, who had been his right-hand man from the outset, was left in chief charge in Scotland. Hence, we may conclude, the distinctly archaeological bent which the operations of the year assumed. As his experience grew, Roy's ideal of what the map ought to be had developed considerably, and the inadequacy of the record of the military antiquities seems to have been the first of its many 'imperfections' which he set himself to remedy. Fate decreed that it should also be the last. Britain and France were already at grips on the North American continent. The very month which Roy devoted to the re-drawing of the Perthshire plans witnessed the disastrous defeat of Braddock at Fort Duquesne. At any moment the flame might spread to Europe. Before the close of the year the danger had become so menacing that the unfinished map had to be hastily rolled up. It seems to have passed into Roy's custody, and to have remained in his possession till his death; we shall find him disposing of it in his will.⁵

¹ *Mil. Ant.*, p. 155.

² It is perhaps worth noting that Roy's survey, unlike those of Gordon and Horsley, was made from east to west (*Mil. Ant.*, p. 157). This was, as it happens, the direction in which its original designer had worked (*Roman Wall in Scotland*, pp. 308 f.).

³ See, for instance, the last sentence of the passage quoted on p. 171 *supra*.

⁴ Cf. *Mil. Ant.*, pp. vii ff.

⁵ See *infra*, p. 208. According to Gough, *British Topography*, ii, p. 586, it was in the Ordnance Office in 1780. But there is no reason to believe that this statement is any more accurate than the rest of the paragraph in which it occurs: see *supra*, p. 163 foot-note ⁵, and *infra*, p. 203.

We are now at the close of the first of the chapters of Roy's life with which we have any direct concern. But, before we take leave of it, there is a biographical question of considerable interest to be settled. In what capacity was he rendering service during the survey of Scotland? The *Gentleman's Magazine*, it will be remembered, asserts that he was a colonel of artillery as early as 1746, while Chalmers suggests that he was given the rank of practitioner-engineer, the lowest step in the ladder, in 1748. Odd as it may appear, a study of the evidence forces us to the conclusion that from first to last he was a civilian, and that he did not don military uniform till the very end of 1755. The only alternative is to suppose that he was a private soldier or a non-commissioned officer, an hypothesis which is quite untenable in the light of the position of authority which he occupied, to say nothing of the fact that he associated on equal terms with commissioned officers like Melville. Chalmers may, therefore, be right in saying that he was originally in the employment of the post office at Edinburgh. Watson was closely connected with Edinburgh, his father being Thomas Watson of Muirhouse; in 1747 he planned a new magazine for the Castle. He may well have made Roy's acquaintance there, and subsequently picked him out as having special qualifications for the post to which he appointed him.¹ Whatever may be the truth as to this, none of Roy's biographers have set forth quite correctly the documentary evidence as to his first connexion with the army. It may, therefore, be permissible to summarize it here.

What professed to be a complete record of "the military progress of the future General" was printed in the *Proceedings of the Society of Antiquaries of Scotland* for 1872,² the source being the Army Lists, publication of which began in 1754. The statement is full and accurate, so far as it goes. But it has one defect: it starts too late. It opens with the assertion that "the first time that the name of William Roy appears in the Army List is in March 1757". This is true, if search be restricted to the corps of Engineers. Roy is first mentioned as a member of that corps in the fourth of the published volumes, which comes down to March 1757. He figures there as a practitioner-engineer at 3s. a day, a grade which nominally ranked with that of an ensign of foot, although the latter received 3s. 8d. a day together with 3s. a day for subsistence; it may be added that the daily pay of a lieutenant was 4s. 8d. together with 3s. 6d. of subsistence money. This last point is by no means irrelevant, for on an earlier

¹ Roy himself, in the passage quoted *supra*, p. 165, says that he acted as "assistant Quarter-Master". Porter in his *History of the Corps of the Royal Engineers*, ii, p. 229, goes a step farther and makes him "Assistant Quarter-Master-General". So, too, Portlock in his *Memoir of the Life of Major-General Colby* (1869), p. 16, where he is spoken of as "General Roy, R.A.", an echo of the blunder which we have traced back to Gough.

² Vol. ix, pp. 563 f.

page of the same volume Roy's name is included among those of the lieutenants of the Fifty-first Foot (Major-General Napier's), the date of his commission being given as 4th January 1756. Nor is even this his earliest appearance in the official lists. The immediately preceding volume—the third of the published series—comes down to May 1756, and there too (as we should expect from the date of his commission) he is to be found as one of Napier's lieutenants. The number of the regiment, however, is no longer the same; it is the Fifty-third Foot, not the Fifty-first. A re-numbering must obviously have taken place between May 1756 and March 1757.

For our next hint we must turn to the files of the *London Gazette*. There (No. 9,548), under date 24th January 1756,¹ we have a list of the lieutenants and ensigns appointed to a new regiment of foot "to be forthwith raised" at Exeter by Colonel Napier, and the last lieutenant to be mentioned is "Engineer William Roy". Roy, therefore, must have been posted to the corps before he obtained his commission as a lieutenant in the line. That being so, his name should have appeared among the Engineers in the third of the printed Army Lists (August 1755–May 1756). The omission is clearly accidental, and it is perhaps not surprising in the circumstances. This was the first occasion on which the Engineers were included in the Army List at all, and their inclusion was obviously decided on hurriedly, since they have no place upon the title-page. We need not wonder that the roll should be incomplete. In any event the inference drawn from the entry in the *Gazette* is fully confirmed by the official 'Record' of the corps, for information regarding which I am indebted to Capt. Blyth, R.E., Acting Secretary of the Royal Engineers' Institute at Chatham. The 'Record' shows that Roy was appointed a practitioner of engineers on 23rd December 1755, and that (as we already know) he received a commission as lieutenant in the 'Fifty-third' Foot on 4th January 1756.²

¹ I owe this reference to Mr. John A. Inglis of Auchendinny.

² Col. Vetch in the *Dict. Nat. Biogr.* (xlix, p. 372) says: "On 23 Dec. 1755 Roy, who had already received a commission in the 4th King's Own Foot, was made a practitioner-engineer." So far as this statement agrees with what has been said above, it is doubtless drawn from the 'Record' of the Royal Engineers, which Col. Vetch cites as one of his sources. The alleged connexion with the Fourth Foot is harder to explain. That the allegation had no foundation in fact seems certain. The manuscript Army List for 1752, which was kept up to date for some years afterwards, and which is now in the Record Office, includes two battalions of the Fourth King's Foot, but Roy's name does not occur in either list of officers. It may perhaps be conjectured that Col. Vetch found the shortness of the interval between Roy's appointment as a practitioner and his commission as a lieutenant inexplicable except on the theory that he had previously been an ensign. In those days the seconding of officers from line-regiments was a recognized means of securing an adequate supply of practitioner-engineers; but, if that had happened in Roy's case, he would undoubtedly have been gazetted to Napier's regiment as 'Ensign William Roy', not as 'Engineer'. If this hypothesis as to the origin of the mistake be accepted, it is easy to imagine a confusion between the number of the regiment and the date of the commission.

What really happened is now fairly obvious. The autumn of 1755, and the months that immediately succeeded it, witnessed a national movement which—*magnis componere parva*—was not altogether unlike the tremendous ordeal through which our own generation so recently passed. The army was found to be too small for the task that awaited it; fresh regiments were called into existence; men originally destined for civilian callings ranged themselves under the colours. Roy, though not himself a soldier, had been for so long a man under authority, having under him soldiers, that his immediate response to the appeal was a matter of course. And it was equally a matter of course that he should attach himself to the corps where his special abilities were most likely to prove useful. But he was now twenty-nine years of age, with a valuable experience behind him. It would have been unreasonable to make him start from the same point as the ordinary subaltern not yet out of his teens. His appointment as a practitioner-engineer gave him the same rank as an ensign, thus opening the way for a lieutenancy, and after an interval of less than a fortnight his lieutenant's commission followed. The lieutenancy was, as we have seen, a lieutenancy in the army; he did not become a lieutenant of engineers till 1759. And to the end his army rank was always in advance of his rank as an engineer. When he was made a major-general in the army in 1781, he remained a captain of engineers, not obtaining the full colonelcy of the corps until nearly four years later.

Roy's career as a soldier lies outside the scope of our inquiry. But it may be noted that, after being stationed for some time at Chatham, his regiment took part in Sir John Mordaunt's ill-starred expedition to Rochefort, and that he was one of the witnesses at the subsequent court martial. His later continental experience was happier. He speedily proved his capacity, and before the close of the Seven Years' War he had been appointed Deputy Quarter-Master-General in Germany. In spite of his preoccupation with his more distinctively military duties, his interest in his original work evidently remained unimpaired. As soon as the war was over, he was not only ready, but eager, to take up the broken thread. Indeed, reflection had apparently enlarged his ideas considerably. We may take it for granted that he was himself responsible for the plan adumbrated in the following extract from the scientific paper already quoted. After speaking of the 'imperfections' that marred the usefulness of the unfinished map of Scotland, he proceeds:

"On the conclusion of the peace of 1763, it came for the first time under the consideration of Government, to make a general survey of the whole island at the public cost. Towards the execution of this work, whereof the direction was to have been committed to my charge, the map of Scotland was to have been made subservient, by extending the great triangles quite to the northern extremity of the island, and filling them in from the original map. Thus that imperfect map would have

been effectually completed, and the nation would have reaped the benefit of what had been already done, at a very moderate extra-expence."¹

For twelve years Roy continued to hope that his great scheme of a Government survey, conducted on scientific principles, might at any moment go forward. In July 1765 he was appointed "to inspect, survey, and make Reports from time to time of the state of the Coasts and Districts of the Country adjacent to the Coasts of this Kingdom and the Islands thereunto belonging".² Apart, however, from a tour of inspection in Ireland, his report on which is still extant in manuscript,³ little or nothing practical seems to have resulted. The miscellaneous duties that occupied the period of waiting must have left him a tolerable amount of leisure, for it was now that his most serious work in Roman studies was done and the *Military Antiquities* written. More precisely, it was between the autumn of 1764 and the summer of 1773 that his archaeological activity attained its maximum. The earlier limit he fixes for us himself in his 'Prefatory Introduction', where he tells us 'that by 1764 "the observance of the actual manœuvres of modern armies" had so effectually interfered with his search after Roman camps that "the inquiry into this branch of antiquity . . . was now in a great degree forgotten, and probably would never have been more thought of, had it not been for the accidental discovery of a camp in the south-west of Scotland"'. The camp, he goes on to say, was at Cleghorn in Clydesdale, and the discovery took place in autumn. In point of fact, his 'Plan of the camp of Agricola at Cleghorn in Clydesdale' (plate ix) is dated 'Sep^r. 7th. 1764'.

No indication is given as to who the discoverer was, but there is no real room for doubting that it was Roy. We may take it as certain that the incident occurred when he was spending a short furlough with his relatives. His father had died in the end of 1748, and the family would then appear to have removed to Lanark, where the widow survived until 1777.⁵ The site of Cleghorn camp

¹ *Philosophical Transactions*, lxxv, p. 387.

² The words are those of a Royal Warrant (*War Office Records*, Class 55, No. 365, p. 14), dated 31st July 1765, and addressed to the Master of the Ordnance, giving directions for the payment to Roy of an allowance of twenty shillings per day in respect of these duties. Mr. S. C. Ratcliff, of the Public Record Office, who has kindly made search for me, writes that the payment continued to be made quarterly until 31st March 1790 (*W. O.*, 52/37, p. 178), that is, until the last quarter-day before Roy's death. This allowance does not seem to have covered the special missions which he more than once discharged abroad. Thus, *W. O.* 55/365, pp. 118 f. shows that he received £3 a day for 119 days (26th Oct. 1765–21st Feb. 1766) on extraordinary service at Dunkirk.

³ It is dated 1766. See *Notes and Queries*, 2nd Series, vii, p. 358. Soon afterwards he was despatched to Gibraltar to report upon the defences.

⁴ *Mil. Ant.*, p. vii.

⁵ The parish register of Carluke has the entry 'Mortcloth to John Roy' against the date 25th December 1748, and the corresponding entry 'Best Mortcloth to Mrs. Roy in Lanark' against

would thus be within a mile or two of his mother's house. The language used rather suggests that he had stumbled upon it in the course of a stroll, although it is also possible that it was brought to his notice by some resident who had heard from his friends of his interest in such things. Whatever may have been the circumstances attending the "accidental discovery", its effect was immediate. The old enthusiasm was rekindled. A careful survey was carried out with the aid of proper instruments, as is clear from the fact that the drawing is entitled a 'plan' and not a 'sketch'. This distinction was one in regard to which Roy was most punctilious. As we shall have to refer to it more than once in the sequel, it will be well to quote his own description of the underlying principle:

"It seems necessary to observe, that though a considerable part of these plans were made from accurate measurement, yet this was not always the case; it being impossible, now and then on a journey, to find time, or constantly to be provided with the necessary instruments for taking exact plans. Some of them were therefore done by common pacing only; and as the same sort of fidelity seems necessary in plan-drawing as in history, in order not to mislead, therefore such as were taken after this slighter method are called *sketches*, to distinguish them from those that were measured with precision, though it is hoped that even the slightest kind will be found not to depart essentially from the truth."¹

There was a special reason why the unexpected emergence of a 'temporary' camp at Cleghorn should give Roy food for thought. In his earlier speculations, which were admittedly based on those of Melville, he had been inclined to hold that there was no evidence for the ordinary view that Agricola had advanced into Caledonia by the western route.² The indications, he believed, pointed rather to the east. So far as the Scottish side of the border was concerned, this theory found its main support in the existence at Channelkirk, in Berwickshire, of the remains of a camp which had been identified as Agricolan. It is interesting to learn from Roy³ that the actual discoverer was Melville. Melville himself is silent upon the subject, both in his contribution to Gough's *Camden* and in the private letter which has been referred to above.⁴ But Roy, though he gives no details, says just enough to enable us to fix the date with some approach to accuracy. He tells us that the discovery was made "some time after" the original expedition to Strathmore, and adds that Melville was "soon after called to more important

the date 6th July 1777. There can hardly be a doubt that the latter refers to Roy's mother, who would naturally be buried beside her husband. If so, it shows that the widow was settled in Lanark at the time of her death. And the probabilities are all in favour of the removal having taken place early in 1749. John Roy's will, which was executed a week or two before his death, and a copy of which is in the General Register House at Edinburgh, discloses a degree of financial embarrassment that must have rendered the breaking up of the old home inevitable.

¹ *Mil. Ant.*, p. xi.

³ *Ibid.*, p. vi.

² *Ibid.*, pp. vii f.

⁴ See *supra*, p. 171.

employments, which necessarily occasioned his being long absent from Britain". The visit to Lord Panmure took place in the summer of 1754, and in the spring of 1756 Melville sailed for the West Indies, where he remained for many years, except for brief visits to Europe in 1762 and again in 1769. It is, therefore, reasonable to suppose that Channelkirk was discovered in 1755. In the summer of that year the Twenty-fifth Regiment was moved from Ireland to Glasgow, when Melville was specially detailed for recruiting service.¹ His quest for 'King's Own Borderers' would naturally lead him into Berwickshire. The road then in use between Edinburgh and Lauder traversed the site of the camp diagonally,² so that the remains could hardly fail to catch the eye of an observant traveller. Many such must have noticed them before. Melville was the first to interpret them as Roman. We may be sure that the fact of the discovery was communicated to his 'proselyte' at the earliest opportunity. Whether Roy was able to visit the spot at the time is much more doubtful. The point is one to which we shall have to return later. What concerns us meanwhile is the effect produced upon his mind by the finding of Cleghorn.

That event did more than reawaken a slumbering interest. It suggested fresh possibilities as to the line of Agricola's advance, and so presented a new problem for solution. The challenge thus thrown out was accepted in a characteristically scientific spirit; before an explanation could be formulated a search for further evidence must be made. Roy's duties in London precluded a personal investigation. Accordingly, as he informs us in a foot-note,³ he communicated with "Mr. Commissioner Clerk", and requested him to "examine Annandale" for traces of temporary camps. "Mr. Commissioner Clerk" was undoubtedly George Clerk or Clerk-Maxwell, the second son of Sir John Clerk of Penicuik, and the grandfather of Clerk-Maxwell, the physicist. He had been appointed a Commissioner of Customs in 1763, and he was intimately associated with the district to be explored. He had inherited the property of Drumcrieff in Annandale from his father, while he became possessed of the estate of Middleby through his marriage with Miss Maxwell, the heiress, who was his cousin and whose name he assumed. On the death of his eldest brother, in 1783, he succeeded to the baronetcy. Melville's intimacy with the Penicuik household will not have been forgotten. It is more than probable that it was he who introduced his 'proselyte' to what would be a singularly congenial circle. Sir John himself, generally spoken of by his contemporaries as 'Baron Clerk', a title derived from his office of Baron of the Exchequer, was, of course, an indefatigable collector of Roman antiquities, and an enthusiast in everything that related to the Roman occupation of Scotland. In all likelihood it was under his influence

¹ *Scottish Historical Review*, xiv (1917), p. 121.

² See *Mil. Ant.*, plate vi.

³ *Mil. Ant.*, p. viii.

that Roy brought the Roman road from Channelkirk and Soutra across country by Mavisbank to Cramond, instead of taking it (as he ought certainly to have done) by Dalkeith to Inveresk, and thence within easy reach of the sea to the same destination.¹ If this suggestion be accepted, it follows that the theory must have been adopted not later than 1755, the year of the Baron's death.

Returning to 1764, we find that Clerk-Maxwell's search of Annandale was successful. He discovered what he believed to be one temporary camp near Lockerbie, and the vestiges of another at Tassies-Holm, near Moffat. Even when the latter had been set aside as too fragmentary to be conclusive, the former, taken along with Cleghorn, seemed to Roy "to put it beyond a doubt, that one division, at least, of Agricola's army, or of some other that used a form of castrametation agreeing perfectly with his, had marched by this road"²—that is, by the road from Carlisle to the western end of the isthmus. By the time he received Clerk-Maxwell's report—indeed, very possibly before he communicated with him at all—Roy was once more in London, and during the next five years his archaeological studies must have been on purely theoretical lines. We may presume that, while the particular case of Scotland was never far from his thoughts, his main attention was given to the ancient authorities, notably Polybius, Tacitus, and Ptolemy. The spurious *De Situ Britanniae*, too, which had been published in 1757, was now available to mislead him. Fortunately, his sense of the importance of accurate drawings remained unimpaired. Plate vii presents us with a 'Sketch of Agricola's camp on Torwood-moor, near Lockerby in Annandale', while plate viii includes a 'Sketch shewing the situation of some old intrenchments near Tassies-holm, in the head of Annandale, supposed to be the vestiges of one of Agricola's camps'. It will be noted that in both cases the drawings are described as 'sketches', not as 'plans', a clear indication that the observations on which they are based were made 'on a journey', when the necessary instruments for accurate measurement were not at hand, and recourse had to be had to pacing. Plate vii is dated '1769', and the sketch of the entrenchments at Tassies-Holm undoubtedly belongs to the same year. This year, in fact, deserves to be marked with a red letter in the story of Roy's researches. By combining stray pieces of evidence, we can follow his footsteps pretty closely.

¹ See *Mil. Ant.*, p. 103, for Roy's view as to the line of the Roman road. That Sir John Clerk was ultimately responsible for the theory may be inferred from a passage in Sir John Sinclair's *Statistical Account of Scotland* (vol. x, p. 287), where the writer, after describing certain antiquities found at or near Mavisbank, proceeds: "These circumstances led Sir John Clerk, who was well acquainted with the antiquities of this country, to suppose that this must have been a Roman station. And, accordingly, the late General Roy has pointed it out in his maps as the place where the Romans passed the North Esk, in their way from the South to Cramond."

² *Mil. Ant.*, p. viii.

His mother was still alive and resident in Lanark. We may suppose that his primary object was to visit her after a five years' interval. It is, however, certain that he was also bent on verifying some of the theories that had been taking shape in his mind. Entering Scotland by the western route from Carlisle, he lingered long enough in Annandale to examine, probably in company with Clerk-Maxwell, the camps of Torwood Moor and Tassies-Holm, and to make his sketches. As he continued his journey northwards through the valley of the Clyde, he kept a keen look-out for any signs of an entrenchment that he could associate with Agricola. This we may confidently infer from the passage in which, after giving a brief account of Tassies-Holm, he goes on to say:

"Advancing from this place, along the Roman Way, into Clydesdale, search hath been made in the neighbourhood of Elwin Foot, and Crawford castle, for another camp, at the usual distance of a day's march, but hitherto without success."¹

Despite the impersonal mould in which this sentence is cast, it is not open to question that Roy himself was the searcher. And the same is true of the immediate sequel:

"Neither have any vestiges, as yet, been discovered near Culter or Biggar, near which places it is likely the next must have been."²

Lanark would be quite a convenient centre for exploring the neighbourhood of Culter and Biggar, and Roy may have devoted to this task some portion of the time which he spent with his relatives. Alternatively, the investigation may have been an incident of his return journey to London, for one of the few explicit statements he makes about the tour of 1769 is that in travelling south he passed through the Melrose district.³

The shortest way from Lanark to Melrose lay down the valley of the Tweed by Peebles and Galashiels, and the choice of it would have the added advantage of bringing him close to the site of the Roman fort at Lyne, which (as we have seen) it is quite possible that he had never examined. On the other hand, Lyne was a permanent station, while at the moment Roy's whole interest was absorbed by the problem of the temporary camps. For this reason it seems *a priori* more probable that he crossed to Edinburgh, where he would find old acquaintances to welcome him, and then proceeded southwards along what he believed to be the eastern line of Agricola's advance. To this period I am disposed to attribute plate vi, which is a 'Sketch of Agricola's camp near Channel Kirk'. Channelkirk, it will be remembered, had been discovered by Melville, in all likelihood in 1755. Roy, however, does not seem to have heard of it until it was too late to include it among the sites which he surveyed in the summer

¹ *Mil. Ant.*, p. 61.

² *Ibid.*, l. c.

³ *Ibid.*, p. 115.

of that year. Had it been otherwise, we should certainly have had a 'plan', and not merely a 'sketch'. He has told us himself that the use of the term 'sketch' implies that the drawing was made 'on a journey', and the tour of 1769 fits in with the general story much better than does any other of which we know. Moreover, the hypothesis can be supported by evidence drawn from the plate itself. The 'Old Road to Edinburgh', along which we pictured Melville as riding in 1755, is shown winding in leisurely fashion diagonally across the camp. But at some distance to the east there appears also a small section of the 'Turnpike Road to Edinburgh', with a 'New Inn' on the banks of the stream hard by. Now in 1759 an Act of Parliament¹ had been passed authorizing the improvement of the road from Edinburgh over Soutra, by Lauder, Greenlaw, and Coldstream, into England. This is undoubtedly the 'Turnpike Road' which figures in Roy's 'sketch' of Channelkirk. Chalmers, who mentions that it was the first road in Berwickshire to be "placed under the useful regimen of turnpike laws", adds in a foot-note that "it was begun on the 7th July 1763, it was opened for carriages on the 28th of October 1766, and it was finished in the subsequent December".² It is hardly necessary to point out how well this harmonizes with the suggestion that Roy's visit took place in 1769.

We may be sure that, as he approached Melrose, a Roman day's-march south of Channelkirk, he hunted eagerly for any clue to the whereabouts of the temporary camp which he believed that Agricola must have constructed in the neighbourhood. But the ramparts of the great enclosure that once dominated the confluence of the Leader and the Tweed had been too thoroughly demolished for any trace of them to be discernible. Nearly a century and a half had to elapse before the spade revealed the exact spot on which the Roman soldiers had pitched their leathern tents.³ The fruit which the visit bore was of a different, and wholly unexpected, kind. When he reached St. Boswells, he seems to have quitted the line of the Roman road and to have turned westwards, heading for Carlisle by way of Hawick.⁴ As he journeyed towards the

¹ 33 George II. c. 56. There is no copy of this Act in any of the Edinburgh legal libraries, and the title in the printed list does not make it immediately obvious that it is the road past Channelkirk that is intended. Mr. S. C. Ratcliff, of the Public Record Office, has, however, been good enough to send me a transcript of the preamble from the Parliament Roll (33 George II, part 10, m. 1) which puts the matter beyond doubt. It runs: "Whereas the high road leading from Deanburn bridge to the confines of the County of Midlothian through Soutrahill by Channelkirk Greenlaw and Antonhill to the side of the Tweed opposite to Coldstream and from thence to the west end of the village of Cornhill in the County Palatine of Durham is during the winter season or wet weather almost impassable &c. &c."

² *Caledonia*, vol. ii (iii), p. 313, and foot-note (c).

³ See Curle, *A Roman Frontier Post*, pp. 15 ff.

⁴ Otherwise he could not possibly have missed "the old course of the way" of whose existence

Border, his mind busy with the problems of the Roman invasion, he was deeply impressed by the view of the three peaks of the Eildons, and it suddenly struck him that they must indicate the position of the Trimontium of Ptolemy, hitherto placed by general consent in the south-west of Scotland, somewhere in the neighbourhood of the Solway. His own words are :

"In returning from the north, in 1769, through this part of the country, it first occurred, that if such hills as these, with any vestiges of intrenchments near them, or even a Roman way pointing towards them, had been situated in Annandale, or any where near Solway frith, their remarkable aspect would have suited well with the etymology of the Roman Trimontium."¹

To any one familiar with the locality it is plain that it must have been as he looked back upon the Eildons from the south that the idea came to him, for it is from that side that their domination of the landscape is so remarkable. It was, therefore, too late for him to make further search for signs of a Roman settlement at or near the foot of their slopes.

From Carlisle he travelled to York, making drawings, as he passed, of two camps whose outlines appeared to him to have some affinity to that of Birrenswark, which he may have revisited when sojourning with Clerk-Maxwell in Annandale, and which he considered to have been "thrown up at some other period of time, and by some other Roman general than Agricola".² We have the result in the 'Sketches of the camps at Kreiginthorp-common, near Kirkby Thure, and Reycross on Stanmoor', which together occupy plate xvii. The diligence with which material was collected during the tour of 1769 suggests unmistakably that the possibility of publication had by this time assumed a more or less definite shape. Originally, as he explains in his 'Prefatory Introduction',³ he had contemplated nothing more than two short essays, one on the ancient system of castrametation of the Romans, and the other on the march of Agricola into Caledonia. The project, however, grew more ambitious as he proceeded, and the zeal with which he followed up the scent of Trimontium appears to indicate that he had already resolved on a serious attempt "to rectify the ancient geography of these parts".⁴ Reflection served to strengthen his conviction as to the soundness of his conjecture regarding this particular site, especially when he learned "on inquiry afterwards made"⁵ that the Roman road could be traced

he only learned "on inquiry afterwards made" (*Mil. Ant.*, p. 116) ; and he would certainly have taken occasion to carry out the "more accurate observation" of Chew Green, which he felt to be desirable (*Mil. Ant.*, p. 117, foot-note).

¹ *Mil. Ant.*, p. 115.

² *Ibid.*, p. 73.

³ p. ix.

⁴ He tells us (*Mil. Ant.*, p. 91) that the idea of making such an attempt was first suggested to him by a remark made by Stukeley in his Commentary on the *De Situ Britanniae*.

⁵ *Mil. Ant.*, p. 116.

for nearly twenty miles north of the Cheviots, pointing steadily towards the Eildons. He seems to have had friends in or near Melrose on whose powers of observation he could rely, for, after noting the success of his inquiry as to the road and its course, he continues:

"Accordingly, directions were given to examine the neighbourhood of the Eildons, in order to see whether any vestiges of a station could be discerned near them; and, in consequence of this search, some imperfect traces of an intrenchment were perceived at the village of Eildon, situated under the eastern skirt of the hills."

These vestiges were made the subject of a personal inspection two years later; "but, it must be owned, were found by much too slight to decide absolutely the point in question".¹ The decision had to wait for the advent of the North British Railway and Mr. James Curle. Our information as to the tour of 1771 is meagre in the extreme. We have just learned that Melrose was included in the itinerary, but there is nothing to show whether Roy took it on his northward or on his southward journey. It may be assumed as a matter of course that a visit was paid to his aged mother at Lanark. The only other locality as to which there is no doubt is Perthshire. His various theories must now have been more or less completely developed, and the plan of his book mapped out. Possibly some of it had actually been written. He may have taken advantage of the present opportunity to renew or confirm his impression of camps or forts with which he was already familiar. But the object of his expedition to Central Perthshire was as definite as that of his mission to the Eildons, and it was much more successfully achieved. It will be simplest to let him tell his own story:

"From this suite of camps now discovered, such a number of points were ascertained as sufficiently indicated the general route or routes by which the Roman army advanced from the northern counties of England, as far as Strathmore in Scotland. But as in penetrating from Strathern into this last mentioned part of the country, they were under the necessity of crossing the great river Tay, it naturally occurred, that at the passage of this remarkable river, either on its western or eastern bank, the army would probably encamp; and that the vestiges of their intrenchments might possibly be found to exist. Accordingly, proper search being made, in 1771, the remains of this camp were discovered on the east bank of the Tay, at a place called Grassy-walls, about three miles north from Perth. Even the partial existence of this work gave great pleasure, and was considered as exceedingly fortunate."²

From the title of plate xii, which runs 'Plan shewing the vestiges of Agricola's camp at Grassy Walls, on the east bank of the Tay; as also the situation of

¹ *Mil. Ant.*, p. 116.

² *Ibid.*, p. viii.

Bertha, supposed to have been the Orrea of the Romans', it is plain that on this occasion Roy had come provided with a proper outfit of surveying instruments. The British Museum manuscript enables us to add a touch of detail hitherto unpublished. The camp was discovered and the plan made on 21st August 1771.¹ The identification of the neighbouring site of Orrea bears silent testimony to the influence of the *De Situ Britanniae*. Though the name is a Ptolemaic one, the position has obviously been determined by the help of the sequence of stations in 'Richard's' Itinerary. Bertha, believed (with or without reason) to be the original site of the city of Perth, stood at the point where the Almond now flows into the Tay. Maitland, writing in 1757, had stated that the remains of a Roman camp were to be seen there.² But there is no evidence that Roy or his comrades of the original survey had observed anything of the kind in 1755 or the years that preceded. During the latter part of the century, however, encroachments made at intervals by the Almond exposed in the freshly-cut bank the interior of great rubbish-pits, which seem to have exactly resembled those that have since been found at Newstead and elsewhere. Local antiquaries immediately and, as we now know, correctly associated them with the Roman invasion, thus establishing the claim of Bertha to be regarded as a Roman station. The first of these accidental revelations took place about 1759, four years after Roy had been in the basin of the Tay on his earliest archaeological crusade, and it was followed by a second about 1761.³ When he came again on a similar quest in 1771 he would naturally hear of what had happened since his previous visit, and would make a point of securing for his collection a record of the little that was left of the defences of Bertha, or Orrea, as he prefers to call it. It is quite possible that its situation may have been the clue that led to the discovery of Grassy Walls.

The harvest of drawings which the tour of 1771 yielded was uncommonly scanty. Apart from that which has just been discussed, there is only one about which we can be certain—the 'View of the Eildon Hills as they appear from the South East, the Quarter from which the Romans would first discover and approach them' (plate xxi). But there are interesting possibilities in another direction. His journey from Lanark to Perth, or from Perth to Lanark, would lead him through Glasgow. What more likely than that he should have stopped there⁴ to see the remarkable group of altars and other objects which had come to light in the preceding May on the Antonine Wall, and had been presented

¹ See *infra*, p. 224.

² *Hist. of Scotland*, vol. i, p. 198.

³ Cant's ed. of Adamson's *Muses' Threnodie* (1774), p. 25. A third series of pits was exposed in April 1774 (*Ibid.*, p. xxi).

⁴ It may have been then that he made inquiry as to whether there were any traces of the supposed "Roman way leading from Glasgow to Paisley" (*Mil. Ant.*, p. 106).

to the University of Glasgow by the proprietors of the Canal? These are the 'Antiquities discovered at the station of Achindavy on Grime's Dyke, in May, 1771', which are grouped together on plate xxxviii. The general style of representation, the careful attention to scale, and the absence of any indication of indebtedness to any one else, all go to suggest that Roy was himself the artist. If so, the original sketches must have been made now. It is true that Roy never pretended to be an epigraphist, and that there was no room for objects of the kind in his book as he had planned it. Nevertheless, there was a perfectly intelligible motive for his securing drawings when the occasion offered. These were the only inscriptions then in the University of which copies were not otherwise available. Illustrations of all the rest had appeared a year or two before in the first edition of the *Monumenta Imperii Romani, in Scotia, maxime vero inter vestigia valli, auspiciis Antonini Pii imperatoris, a Fortha usque ad Glottam perducti, reperta, et in Academia Glasguensi adservata, iconibus expressa*, which was published about 1767.¹ It is perhaps significant that we shall presently find Roy in correspondence with the probable editor of the *Monumenta*, Professor John Anderson. He may have made, or renewed, acquaintance with him in 1771.

If we are right in concluding that Roy was the author of the original sketches for plate xxxviii, a further inference suggests itself. Plate xxxix is entitled 'Antiquities discovered at the station of Castle-Cary on Grime's Dyke—1769', and shows, besides a 'Plan of a Roman House with a Warm Bath belonging to it in the South East Angle of the Station', two inscribed stones, the first 'expressing some proportion of the Wall to have been raised by the first Tungrian Cohort', and the second being 'an Alter found in one of the Apartments of the House'. As Roy tells us in his text that the bath-house was exposed and the altar to Fortune discovered in 1769,² it might at first sight seem as if the date in the title were intended (like the 'in May, 1771' of plate xxxviii) to indicate the date of discovery. But, if this were so, it would be inaccurate, as Roy would have known. The Tungrian slab was brought to the surface in 1764,³ and became the property of Sir Laurence Dundas, the owner of Castlecary. The altar to Fortune, along with some less important objects from the bath-house, were added to the collection in 1769, and remained there until the whole was made over to the University of Glasgow in 1774.⁴ Is it not, then, probable that '1769' is really a record of the year in which the original drawings were executed, particularly as this is the usual significance of the dates that are

¹ *Roman Wall in Scotland*, p. 171.

² *Mil. Ant.*, p. 161.

³ *Roman Wall in Scotland*, p. 327. Roy is vaguer; writing, as we shall see, in 1771 or 1772, he says "some few years ago" (*Mil. Ant.*, l. c.).

⁴ James Macdonald, *Tituli Hunteriani*, p. 3.

attached to the titles of the plates? It will be remembered that Roy was in Scotland that very year, and that there is good ground for thinking that he travelled from the west to Edinburgh.¹ Castlecary would be on his way, and he may well have revisited the fort, examined the bath-house, and inspected Dundas's treasures. The style in which the altar is represented, the exceedingly careful note of scales, and the fact that the drawing of the bath-house is deliberately called a 'plan' and not a 'sketch', are all in favour of this hypothesis. If it be accepted, it adds an interesting incident to the tour of 1769. At the same time it enhances the value of the plan of the bath-house, inasmuch as we know that it came from a competent hand.²

We have now reached a point at which it will be convenient to glance back for a moment and recapitulate briefly what we have learned as to the gradual growth of Roy's collection of drawings. Arranging under their proper years those which are certain and those in regard to which we have been able to establish a high degree of probability, we get the following result:

1752

Chew Green,³ and 'Watling-street' crossing the mountains (plate xxii); Liddel Moat (plate xxiii); Castle-o'er (plate xxvi); and the bath-house at Netherby (plate xlvi).

1752 or 1753

Wood Castle (plate viii); Birrenswark (plate xvi); and Birrens (plate xxiv).

1753

Castledykes (plate xxvii); and Lyne (plate xxviii).

1755

Ardoch (plate x and plate xxx); Posts near Ardoch (plate xxxi); Dealginross (plate xi); Strageth (plate xxxii); Battledykes (plate xiii); Keithick, Kirkboddo, and Lintrose (plate xiv); White Catherthun (plate xlvii); Brown Catherthun (plate xlviii); Inchtuthil (plate xviii); Camelon (plate xxix); the Roman Wall with its stations (plate xxxv); and Duntocher Bridge³ (plate xxxvii).

1764

Cleghorn (plate ix).

¹ See *supra*, p. 181.

² The drawing in the British Museum, it is fair to state, reads "in 1769", and the preposition accordingly appears in the corresponding 'List of the Drawings' there, from which it has been transferred to the printed 'List of Plates' (*Mil. Ant.*, p. 208). The title in *Mil. Ant.* is, however, an exact reproduction of that in the drawing in the Society's Library, and the drawings in the Society's set are, as a rule, the original sketches (see p. 196, *infra*). The insertion of 'in' in the revised edition may well have been an oversight.

³ As we shall see in due course (*infra*, p. 200 and p. 214), the drawings in Roy's original collection were, in these two cases, entirely different from the published plates.

1769

Channelkirk (plate vi); Torwood Moor (plate vii); Tassies-Holm (plate viii); Kreiginthorp and Reycross (plate xvii); and Castlecary bath-house, &c. (plate xxxix).

1771

Grassy Walls and Bertha (plate xii); the Eildons (plate xxi); and Auchendavy altars, &c. (plate xxxviii).

Among the first forty-eight plates (to which we shall do well to confine our attention meanwhile), we have still to account for three 'plans' of entrenchments, the drawings for all of which were undoubtedly made not later than 1771. That of 'the Roman post at Fortingaul, in Glen Lyon' (plate xix) is perhaps the earliest of these. We have already noted that Roy disclaims its authorship.¹ Presumably, therefore, he obtained it from one of his colleagues on the survey; and, if so, it must be older than 1755, when the survey came to an end. The 'plans of the camps in Pickering-moor, in Yorkshire' (pl. xi) clearly belong to the period when his theories about the campaigns of Agricola had begun to crystallize into their final form; that is, they are later than 1764. Pickering Moor is north-east from York. Roy was in York in 1769, and it is possibly to that year that we should assign his visit to these camps, which stood "on the Roman road leading from Malton to Dunsley, and in a high commanding situation".² This, however, is conjectural. Even greater uncertainty attaches to the 'Plan and sections of the Burgh-head on the Murray firth, the Ultima Ptoroton of Richard of Cirencester, and Alata Castra of Ptolemy' (plate xxxiii). The references to this site in the text³ are couched in terms that distinctly suggest personal observation. An opportunity for such observation may, of course, have occurred when the original survey was in progress, before Roy's transfer to the south of Scotland in 1752. On the other hand, it is not easy to see what motive he could have had for studying the promontory closely at a time when he knew little, if anything, of 'Alata Castra' and nothing whatever of 'Ultima Ptoroton'; there is no evidence that he was interested in Ptolemy till he had become familiar with the *De Situ Britanniae*, and the manuscript of that precious treatise was still reposing in Stukeley's desk when the great map and its creators were swept into the vortex of the Seven Years' War. We may, therefore, prefer to believe that the tour of 1771 (which was meant to be a garnering of the last sheaves of topographical detail) embraced a pilgrimage to the shores of the Moray Firth along 'Richard's' ninth Iter, and back again by his tenth.

There remains a certain number of drawings for which no special effort in the way of field-work was required. Thus, the 'View and plan of the Little

¹ See *supra*, p. 172.

² *Mil. Ant.*, p. 65.

³ *Ibid.*, pp. 131 f.

Pantheon, or Roman Sacellum, vulgarly called Arthur's Oon' (plate xxxvi) was avowedly based on material supplied by Gordon's *Itinerarium Septentrionale*. The various maps, again, were either compiled from books (plates ii and iii) or built upon data accumulated during the survey and remaining in Roy's custody (plates i, xix, xx, xxi, xxv, xxvii, and xxxiv). When we add to these the illustrations of the principles of castrametation as deduced from Polybius (plates iv, v, and xv), we have completed our enumeration of the collection which it was at first intended to place before the public. Indeed, in one respect we have gone beyond it, for the insertion of the plans of the two Catherthuns would seem to have been an afterthought, while the same is possibly true of the plan of the Netherby bath-house. The text was to consist of the book as now printed, as far as page 167, along with a single Appendix. The scope of this Appendix as defined in the 'Prefatory Introduction'¹ is somewhat vague: it is to contain "such things as may chance to occur during the course of the work, that tend to throw new light on any of the subjects treated on; or such as could not with propriety be classed under any of the general heads just now mentioned". In the body of the work a specific promise is given that it will deal with the groups of antiquities recently found at Castlecary and at Auchendavy.² Otherwise it is only alluded to in one or two marginal insets. One sometimes wonders why Roy decided to publish these particular inscriptions, when he has virtually nothing to say regarding any others. A conceivable explanation is that, apart from four Birrens altars and a Birrens tombstone, first noted by Pennant in 1772 and quite possibly unknown to Roy,³ they were the only Roman inscriptions from Scotland of which illustrations were not already available, either in Gordon's *Itinerarium* or in Horsley's *Britannia Romana* or in the *Monumenta Imperii Romani* issued by the University of Glasgow. A desire to round off his own book by bringing the *corpus* up to date would be natural enough, especially if he had the sketches.

Except for the Appendix, the book as designed was entirely finished by the summer of 1772. Always modest, Roy had shrunk from the task of discussing the inscriptions, and had invited Professor John Anderson of Glasgow to undertake the task. Anderson agreed, but did not carry it through until the beginning of 1773.⁴ In the interval new material for the Appendix was collected. From a summer excursion⁵ Roy brought back his 'Sketch of part of the country along

¹ p. xii.

² *Mil. Ant.*, pp. 160 f.

³ They do not seem to have been discovered when Pococke visited the district in 1750. On the other hand, four out of the five are referred to in a letter still extant in manuscript and dated September 25, 1770 (*Proc. Soc. Ant. Scot.*, vol. xxx, pp. 123 f., foot-note). So far as we know, Roy's last sojourn in the neighbourhood was in 1764.

⁴ Anderson's 'Observations' bear date 'January 2d, 1773' (*Mil. Ant.*, p. 204).

⁵ *Mil. Ant.*, p. 171.

the banks of the river Teme, between Lentwardine and Knighton, where it hath been supposed that the Britons under Caractacus were defeated by the Romans under Ostorius; to which are annexed plans of Caer Caradock, Brandon Camp, and Coxall Knoll' (plate xl). The explanatory 'dissertation', which is the first of the five 'detached pieces' that go to make up the Appendix, must have been written immediately afterwards. About this time, too, he fell in with Scheel's treatise on Roman castrametation, which was published at Amsterdam in 1660, and which contained not only the relevant extracts from Polybius, but also all that is extant of the handbook of Hyginus, *De munitionibus castrorum*. He had long known of the existence of the latter; "yet, from the scarcity of the piece, no opportunity had offered of consulting it."¹ It was now studied eagerly, along with the accompanying commentary, and proved so suggestive as to prompt the composition of a second 'detached piece', illustrated by five additional drawings (plates xli-xlv). We may confidently assign this to the autumn of 1772 or the early part of the following winter. 'No. III' of the Appendix is the brief account of the bath-house at Netherby. Anderson's contribution, which is printed as 'No. IV', arrived just after the turn of the year. The last of the 'detached pieces' is the short note on the two Catherthuns. The order in which 'No. III' and 'No. V' occur inclines one to attribute them to the winter of 1772-73, although it is of course possible that they were written much earlier.

The book having been completed, the next step was to set about the preparation of a fair copy. At this point the evidence of the two existing manuscripts becomes important, as a brief general account of them will show. It will be convenient to designate them B. M.² and S. A., after their respective resting-places. Both are folios, and in both cases text and plates are bound in separate volumes. Both bindings are certainly later than the date of Roy's death; two references in the minutes of the Council of the Society of Antiquaries prove that the drawings in B. M. were still on loose sheets in 1791,³ while a third records that on 14th February 1794 those in S. A. "were ordered to be cleaned and bound up".

Taking the text first, we find that B. M. was written out in a formal round hand by an amanuensis, doubtless from the author's original manuscript. Thereafter Roy himself revised it carefully more than once.⁴ In the interval between his first and his final revision, S. A. was copied from B. M. The amanuensis may have been the same; the testimony of the handwriting is inconclusive.⁵ If so,

¹ *Mil. Ant.*, p. 176.

² The reference number is 'King's MSS. 247, 248'.

³ The dates are 4th February and 29th March. See *infra*, p. 211.

⁴ Some of the corrections are certainly, others possibly, made by the scribe. But there are at least one or two others which are clearly in Roy's own hand, as can be proved by comparison with autograph letters of his, now in the British Museum.

⁵ On the whole, I am disposed to regard the two hands as different.

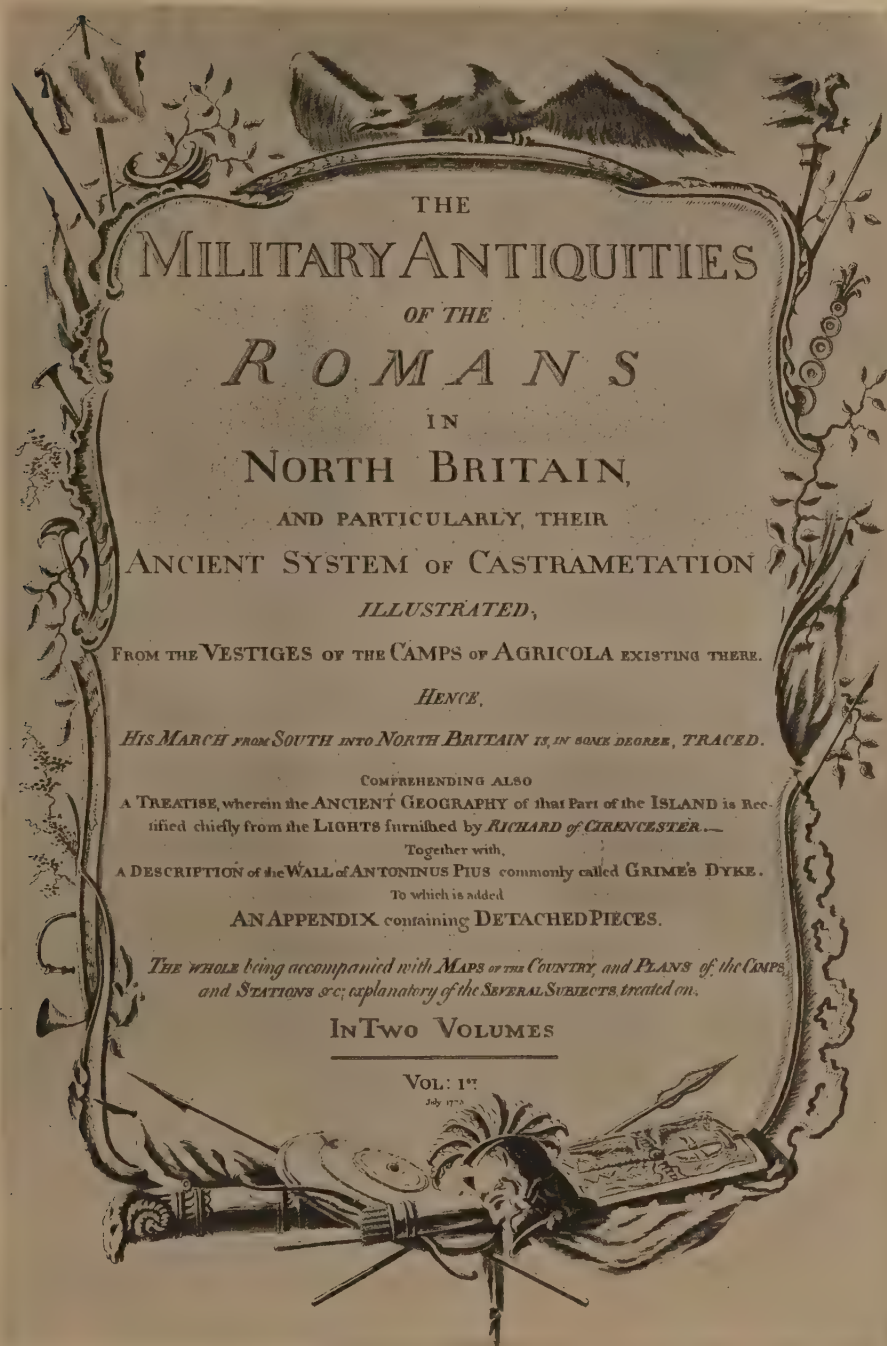


Fig. 1. Title-page of Volume I. From the British Museum MS.

however, he has done his work less carefully. Accidental omissions which result in *non-sens* and therefore betray a lack of intelligence, are more frequent. While the more flagrant of these, such as the omission of whole lines, have been rectified by the culprit on a re-reading, minor gaps seem to have escaped his notice and to have been supplied by Roy, or at all events under his direction, when he came to look through the whole. S. A., in short, is a less finished performance in every sense of the term. Thus, the references to the plates and to ancient authors, which appear as insets in the printed book, are inserted in the margin of B. M., but do not occur at all in S. A. The most striking of the other differences between the two manuscripts is that B. M. is supplied with a dedication to the King, which has no place in the printed book, and also with an ornamental title-page (Fig. 1). The latter has served as a model for the second title-page of the printed book, which is, however, perfectly plain, and which moreover fails to include the final words: "explanatory of the Several Subjects, treated on. | In Two Volumes | Vol: I:^d | July 1773". These reveal a highly interesting fact which had been altogether lost sight of. The *Military Antiquities* was ready for the press fully twenty years before it was published.

The second volume of B. M. is likewise provided with an ornamental title-page, to which, of course, the printed book has nothing to correspond. It reads: "The | Military Antiquities | of the | Romans | in | North Britain | illustrated | Vol: II:^d | Containing | The Maps and Plans referred to and which serve | to explain the Several Subjects treated on | in the First Volume | July, 1773" (Fig. 2). We need hardly hesitate to regard these title-pages, with their ornamental borders, as examples of Roy's own artistic skill. There is a marked affinity between their style and the style of the decorative work with which certain of the plates are embellished, the Roman military *motif* being everywhere conspicuous. Immediately after the ornamental title-page comes a 'List of the Drawings contained in the Second Volume', occupying four pages, and showing, in a separate column, the page or pages of Vol. I on which each plate is alluded to. So far as it goes, the 'List' itself is identical with the printed 'List of Plates'. But it is important to note that it contains only forty-eight entries as against fifty-one. This means that when the book was, as it seemed, completed in July 1773, its plan provided for forty-eight plates and no more.

The 'List' is followed by the drawings themselves, numbered neatly in red from 'I' to 'XLVIII', and corresponding generally, though not precisely, to the first forty-eight plates of the printed book. Two unnumbered sheets are bound up at the end—a drawing of the 'Plan of Agricola's camp at Rae-Dykes near Ury' (plate l), and an engraving which might readily enough be mistaken for a spare copy of the 'Mappa Britanniae Septentrionalis' (plate i). The absence of any number confirms the view that the former does not belong to the original series.

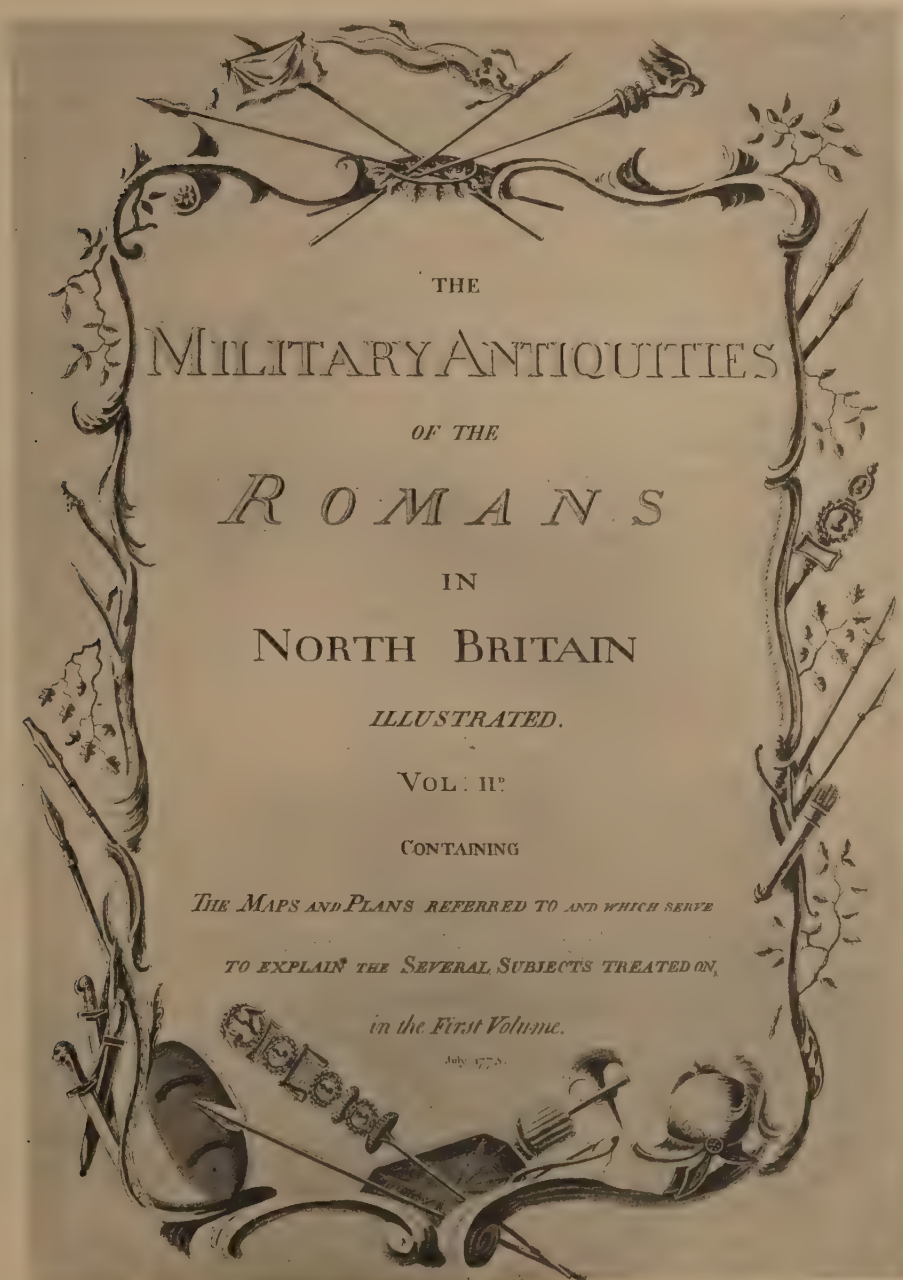


Fig. 2. Title-page of Volume II. *From the British Museum MS.*

A closer inspection of the latter modifies the first impression. In point of fact, with one trifling exception—the correction of a mistake in the Latin of the title¹—the engraving in B. M. is an exact replica of 'I' in the series of drawings, but it lacks certain features which are present in the engraved 'Mappa Britanniae Septentrionalis' as ultimately published. Yet the two are in most respects absolutely identical. They represent, indeed, an earlier and a later 'state' of one and the same plate. The re-discovery of this earlier 'state', and of the drawing from which it was copied, renders possible some interesting deductions. But, before any endeavour to indicate these is made, it will be well to give a short description of the drawings as preserved in S. A.

The correspondence between the plates as published and the collection of drawings appended to S. A. is in many ways closer than is the case with B. M. As in B. M., there is no drawing of the 'Plan . . . exhibiting the ancient camp of Re-dykes near Glenmailen' (plate li). Otherwise the collection is complete, including a drawing of the 'Plan of Tibbers-Castle' (plate xlix), which is wanting in B. M. In reality it is more than complete, for it contains two different versions of the 'View of Duntocher bridge' (plate xxxvii), one of which we shall find by and by to be an interloper. On the other hand, the 'Mappa Britanniae Septentrionalis' (plate i) is not represented by an original drawing at all. In place of the drawing there is a copy of the later 'state' of the engraving. It may be added that the most immediately obvious distinction between the two 'states' is to be found in the title. Fig. 3, which is reproduced from B. M., shows the original title, drawn in all likelihood by Roy's own hand. Except for the alteration of "per Veterum" into "perveterum", the title of the earlier 'state' is virtually identical. In the later 'state', as can be seen by turning to the printed book, the words "*à G^{no} Roy Londini 1774.*" have been inserted within the decorative framework, and the following legend placed beneath: "*TABULAM HANC THOMAS VINCENTIUS REYNOLDS GULIELMI ROY HAERES, SOCIETATI ANTIQUARIORUM LONDINENSIS D. D.*" The description "PL. I" is also new.

There can be no doubt as to the drawings in S. A. having been executed by Roy himself; his style, as revealed by the signed examples of his work in the British Museum,² is too individual to admit of mistake. They are admirably finished and delicately coloured. Those in B. M. can also be confidently attributed to Roy. Here again the style is characteristic, in spite of certain significant differences which become apparent as soon as a drawing from B. M. is laid

¹ The original has 'per Veterum', which is corrected in the engraving into 'perveterum'. Roy cannot be acquitted of responsibility for the mistake, since it recurs in the original title of plate ii (see fig. 4, p. 197, *infra*) and also in the manuscript 'List of Drawings', from which latter it even found its way into the printed book (p. 207). The error was natural enough for one who was not a professional scholar, and who was probably indebted to a friend for the titles.

² See *supra*, p. 172.

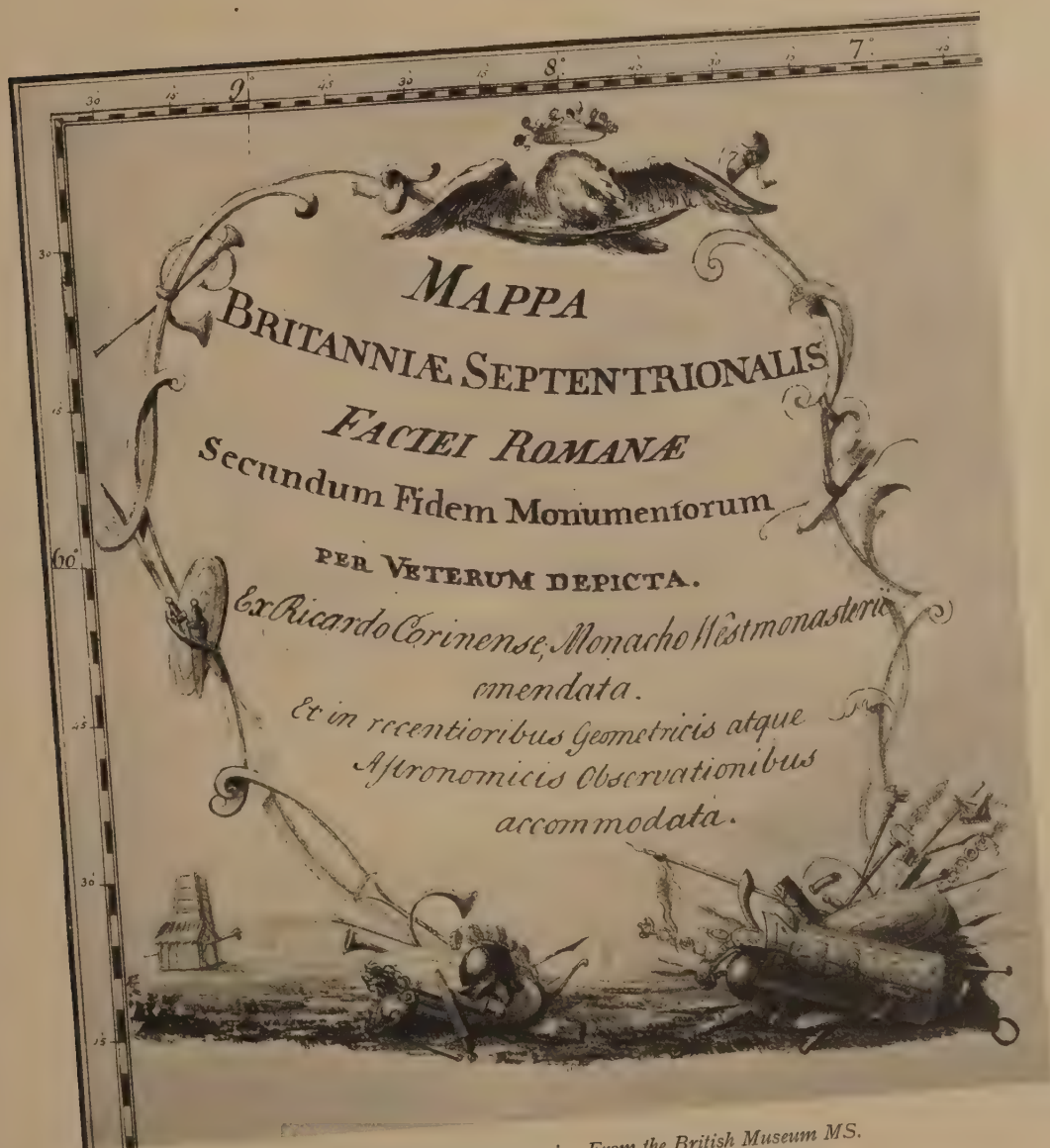


Fig. 3. Original title of plate i. From the British Museum MS.

alongside of its counterpart from S. A. In the former, many unessential details are omitted, while really significant ones are emphasized; light and shade are thrown into stronger relief; the colouring is simpler; some names are left out as unimportant; others are added or brought into greater prominence. In a word, there has clearly been a conscious endeavour to produce something which would lend itself readily to copying by an engraver.¹ As might have been anticipated, it is in the maps showing the relative situations of camps and forts (e.g. plates xx, xxv, and xxvii) that the modifications just described are most conspicuous, for it is there that there was most room for improvement. But the same tendency can be detected everywhere, and it manifests itself in various ways.

In S. A., for instance, the scale is usually given in English lineal measure only, whereas in B. M. it is almost always reinforced by a parallel scale in terms of Roman measurement. And there are a number of minor improvements, such as the introduction of an additional section here and there, or the better arrangement of drawings where more than one appear upon the same sheet. Finally, one may search S. A. in vain for the tasteful decorative devices that are employed, as opportunity offers, to relieve the monotony of the drawings in B. M. The ornamental title of the 'Mappa Britanniae Septentrionalis' has already been illustrated. The two maps that follow are similarly provided. In the case of the first (fig. 4), where the recurrence of the erroneous "Per Veterum" will be observed, the legend is inscribed on a *scutum*, which leans with other arms against a tree, forming a kind of trophy.² The second (fig. 5) displays a variation of the same design, the shield being a *clipeus* and the interior of a Roman camp appearing in the background. Other examples are recorded in the Appendix in connexion with the plans of Grassy Walls (plate xii) and Inchtuthil (plate xviii), where blank spaces are utilized for embellishment.

Roy's purpose, in fact, is clear, and it subsequently found definite expression in his will. Unfortunately, when the book came to be given to the world, those responsible for its publication disregarded his intention, quite possibly through inadvertence. In preparing the plates, the engraver worked systematically upon the drawings in S. A. as his model, so that the result is less satisfactory and less telling than it would otherwise have been. It is true that the better guide has sometimes been followed. Thus a section that does not occur at all in S. A. has been introduced from B. M. into plate xxxii. Such isolated exceptions, however, do not affect the position as already stated. The drawings in S. A. have formed the basis of the engraved plates; and that not merely

¹ The contrast between pl. XXIX and pl. XXX is instructive.

² A very sketchy reproduction of this design is found in the corresponding drawing in S. A., which is, however, quite possibly a copy, made long after Roy's death: see *infra*, p. 213).

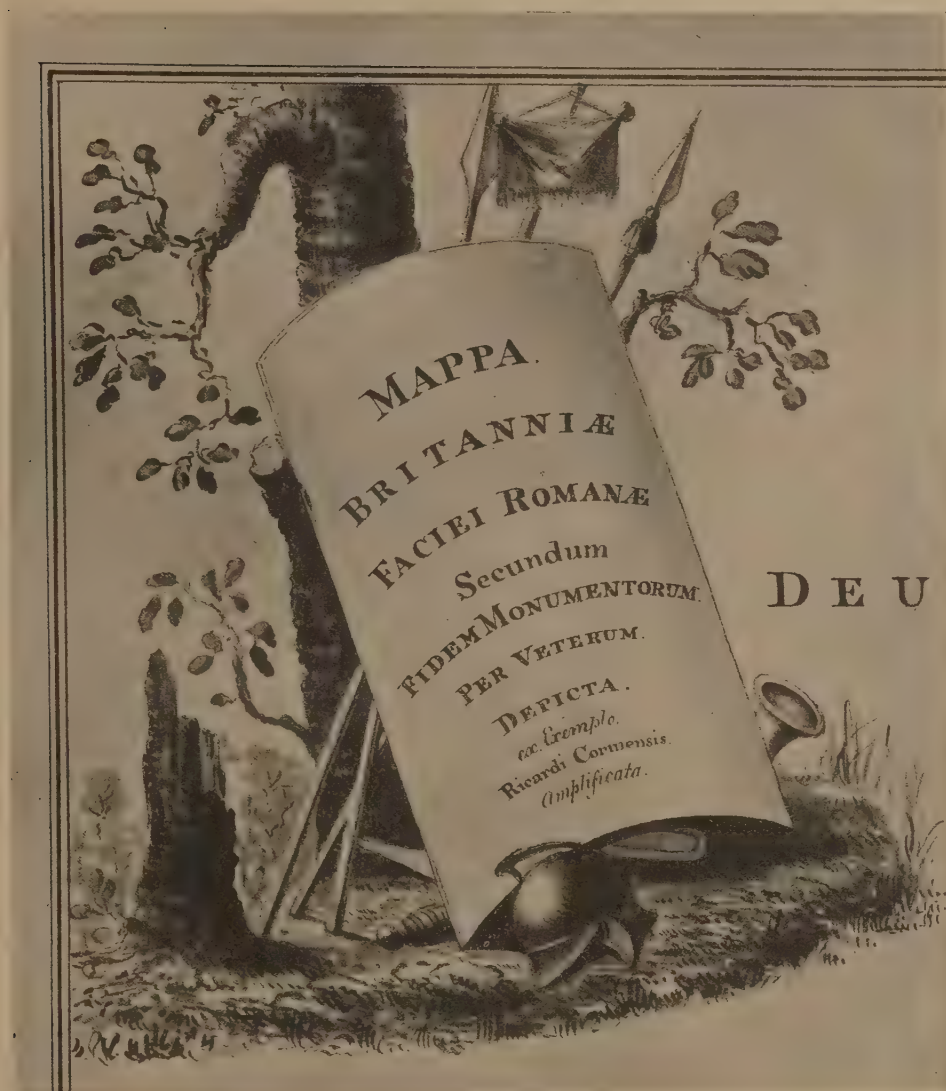


Fig. 4. Original title of plate ii. *From the British Museum MS.*

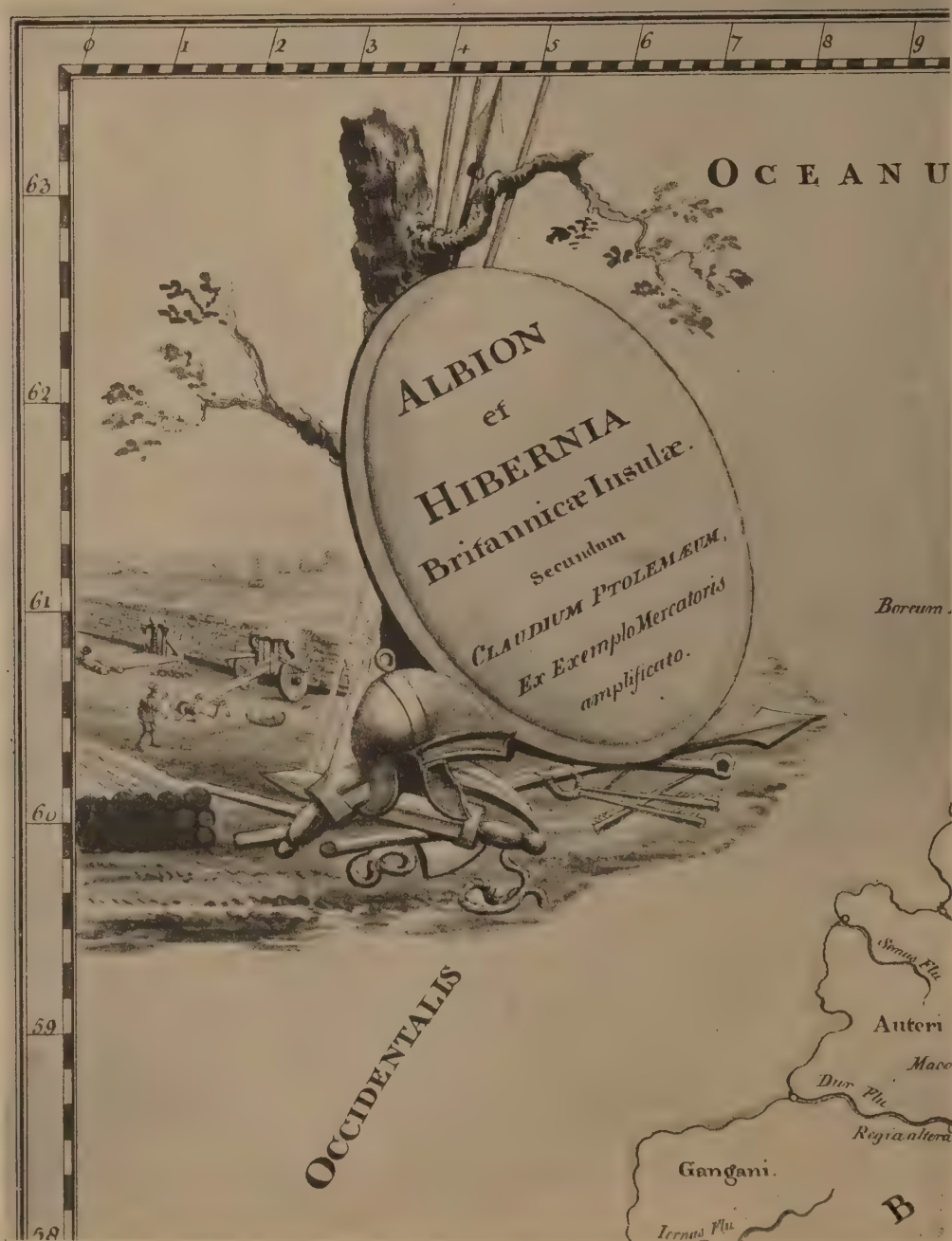


Fig. 5. Original title of plate iii. From the British Museum MS.

as regards their general character, but also as regards the bulk of the details which they embody. As a rule, no attention has been paid to minor improvements, while one or two of considerable importance have also been overlooked. The double system of scales, for instance, has not been adopted.

VIEW of the **LITTLE PANTHEON** or **ROMAN SACELLUM** vulgarly called *ARTHUR'S OON*, formerly situated on the North Bank of the Carron, near a Place named, from this Ancient Building, *STONEHOUSE*, according as it is described in *GORDON'S ITINERARIUM SEPTENTRIONALE*, the Engraving being however corrected.



Fig. 6. Original drawing of Arthur's O'on. From the British Museum MS.

The plan of the Netherby bath is also a case in point, for there B. M. has been wholly set aside, in spite of its manifest superiority.¹ For yet another example we may turn to the view of Arthur's O'on from the B. M. drawing (fig. 6).

¹ See the reproduction in pl XXVII, *supra*, which should be compared with the *Mil. Ant.* plate as engraved (plate xlvj).

Note the picturesque little group of figures in the left foreground, obviously meant to give balance to the composition and so to convey a more pleasing impression, and therefore clearly a later addition. The corresponding space is blank in the S. A. drawing. It is blank likewise in plate xxxvi of the printed book, in the preparation of which everything that savours of adventitious ornament has been rigidly eschewed. The decorative title of the 'Mappa Britanniae Septentrionalis' is only an apparent exception, for plate i was engraved in Roy's lifetime and under his personal supervision. To establish this point, we must make a closer comparison between the earlier and later 'states', both of which, by the way, bear in the left-hand corner the signature of J. Cheevers, who was therefore the original engraver.

An examination of the body of the map shows that, in the interval between the printing of the two 'states', three new sites have been added. These are 'Agricola's camp' at Rae-dykes near Stonehaven, the 'Roman camp' at Re-dykes on the banks of the Ythan, and 'Agricola's camp' at Towford¹ in Roxburghshire. If it is borne in mind that the plans of the two most northerly of the three are not included in the 'List of the Drawings' in B. M., the non-appearance of their sites on the earlier 'state' will not seem in any way surprising, seeing that this 'state' is an exact replica of the original 'Mappa Britanniae Septentrionalis' of July 1773, which is also, of course, the date of the 'List'. At first sight the absence of Towford looks more puzzling, since, in the series as published, a plan of it occurs as far back as plate xxii. But the difficulty vanishes when it is realized that plate xxii is copied from an S. A. drawing, and that the corresponding drawing in B. M. contains no plan of Towford and gives no indication of its site. The B. M. drawing, in fact, conforms in all respects to the description attached to it in the B. M. 'List of the Drawings', a description which the editors have *per incuriam* allowed to be retained in the 'List of Plates' as printed in the *Military Antiquities*: 'Plan of the Roman station and adjoining camps at Chew Green on the head of Coquet, on the border between South and North Britain, supposed to be the Fines mentioned in Richard of Cirencester; to which is annexed a plan showing the pass by which the Roman Watling-street crosses the mountains that separate South from North Britain, in leading from Bremenium by Chew Green, and the intrenchments at Woden Law, towards Trimontium'. Neither here nor in the text of the book is there any suggestion of the existence of a camp at Towford. It must still have been unknown to Roy in July 1773, and its case is thus precisely parallel to that of the camps in Kincardine and Aberdeen.

Our next concern is to try and determine the significance of the date '1774',

¹ The engraver blunderingly calls it 'Totford'.

which is found on the later 'state', but not on the earlier one. Clearly it cannot refer to the year in which the map was drawn, for the drawing was finished by July 1773. Equally clearly it cannot refer to the year to which the later 'state' belongs, for it makes its appearance simultaneously with a note recording that the plate had been presented to the Society of Antiquaries of London by Roy's heir, and that note cannot have been added till after Roy's death, in July 1790. The only other alternative is to suppose that, in spite of its absence from the earlier 'state', its purpose is to mark the year in which the plate was originally engraved. But, before this hypothesis can be accepted, it will be necessary to produce confirmatory evidence. Such evidence is not very difficult to find.

Writing in 1780, Gough, in his *British Topography*,¹ tells us that the so-called Duke of Cumberland's Map had been "reduced" by Roy, who had "engraved a few for presents". We have already had occasion to observe how little reliance is to be placed on the accuracy of Gough's references to Roy and his work.² We need not, therefore, attach too much importance to the alleged motive. But, even if that be set aside as improbable, we are scarcely justified in rejecting the whole story as untrue. We may at least infer that copies of the 'Mappa Britanniae Septentrionalis' were in private circulation in Roy's lifetime. Naturally these would be copies of the earlier 'state', since the later 'state' is subsequent to 1790. This deduction is curiously borne out by Ainslie's nine-sheet map of Scotland, which was issued in 1789. Ainslie's map is on a much larger scale than Roy's, and contains many more entries. But, so far as Roman sites are concerned, it gives precisely the same information. The remains to which Roy appends the designation "Castra Agricolae" are camps of Agricola for Ainslie too; and wherever Roy associates an entrenchment with a particular legion, as he does Birrenswark with the Sixth, Ainslie follows suit. In short, the agreement with the 'Mappa Britanniae Septentrionalis' is complete. The agreement, however, is with the earlier 'state' of the engraving, and not with the later one. Ainslie does not mark either the camp near Ury or that on the banks of the Ythan; and, although he shows an entrenchment at Towford, he does not describe it as Roman.

Ainslie takes us back to 1789, and Gough to 1780. There is still a gap of six years to cross before the year we have in view is reached. To bridge it over we must appeal once more to the original drawings. As already indicated, that numbered 'XXII' in B.M. contains only two plans—one of Chew Green, and one of the pass by which the Roman road crosses the Cheviots, the camp

¹ Vol. ii, p. 586. The whole passage is quoted *infra*, p. 203.

² See *supra*, p. 173, foot-note ⁵.

at Towford not being marked upon the latter. The corresponding drawing in S. A., from which plate xxii as published has been copied, shows three—a new and greatly superior plan of Chew Green, the old one of the pass across the Cheviots, with the camp at Towford inserted, and an entirely fresh item in the shape of a 'Plan of Agricola's camp at Towford in Roxburghshire'. Both the new plan of Chew Green and the plan of Towford are dated 'September 20th, 1774'. This is exceedingly helpful. We know definitely that when Roy finished his book, in 1773, he had not yet seen Chew Green, and that he cherished a wish to visit it in order to check the accuracy of the observations made by his colleagues of the survey in 1752.¹ We know also that he was in Central Scotland in 1774; for, in a paper on 'Experiments for measuring Heights with the Barometer', which he contributed to the *Philosophical Transactions* of the Royal Society, he mentions incidentally that in the course of that year he had personally calculated the height of Schiehallion by "geometrical operations, depending on a base measured in the plain near Taybridge".² Finally, since the drawings on plate xxii are called 'plans', the observations on which they are based must have been taken with the aid of proper surveying instruments.³

These facts enable us to form a clear idea of the sequence of events. When Roy set out for Scotland in 1774, he determined to survey Chew Green *de novo*, and equipped himself accordingly. If we may judge by the lateness of the date (20th September), the visit took place on the return journey. Instead of travelling back to England, as he had done before, by what is now known as the 'Waverley' route, he must have followed the track of the Roman road past Jedburgh to Streethouse, and thence round the shoulder of Woden Law to the head-waters of the Coquet. In doing so, he would inevitably discover the camp at Towford. It lies so close to the line of route that even to-day, when presumably its remains are less conspicuous, it is hardly possible to miss it. An experienced surveyor like Roy would find it an easy matter to transfer the necessary measurements to his note-book, and then push on in ample time to carry through the more complicated task that awaited him as soon as he crossed the border into Northumberland. But, if this was what happened, why was Towford not inserted in the first 'state' of the 'Mappa Britanniae Septentrionalis'? There can only be one explanation. It was because the map was already finished, the plate engraved, and the copies printed off, before the discovery was made. The first 'state' of plate xxii would therefore appear to belong to the spring or early summer of 1774.

Here a brief digression may be permissible, in order to lay once for all

¹ See *Mil. Ant.*, p. 117, foot-note.

² *Phil. Trans.*, vol. lxvii, p. 721.

³ See *supra*, p. 178.

a geographical ghost which made its appearance while Roy was still alive, and which has haunted his memory persistently since his death. In the *Dictionary of National Biography* it wears the following guise:

"At a later date [than 1755] the [Duke of Cumberland's] map was reduced by Watson and Roy, engraved on a single sheet by T. Chievos [*sic*], and published as the king's map. Roy's love of archaeology showed itself in the insertion of the names of Roman places and camps."¹

In giving currency to this statement Colonel Vetch is only repeating what had been said by the biographers who preceded him. His immediate authority would seem to have been the writer of the obituary notice in the *Gentleman's Magazine*. But it is plain that the ultimate source was Richard Gough, who, as far back as 1780, thus describes 'the king's map' in a paragraph of that section of his *British Topography* which deals with the 'Roman Geography of Scotland':

"Mappa Britanniae Septentrionalis faciei Romanae secundum fidem monumentorum perveterum depicta ex Ricardo Corinensi, monacho Westmonasterii, emendata et in recentioribus geometricis atque astronomicis observationibus accommodata. J. Cheevers sc'. a single sheet 18 inches by 23½; drawn by Colonels Watson and Roy, and called the king's map. It has many camps, a good number of Roman names, a few modern ones of towns, and all the rivers and hills properly laid down."²

There can be no doubt that Gough regarded 'the king's map' as something entirely different from that which Roy had "engraved for presents". At the risk of some repetition it will be well to make this clear by quoting the relevant passage in full. It occurs in the section of the *British Topography* headed 'Maps', and runs thus:

"Colonel Roy of the artillery, and his engineers under Colonel Watson in the winter of 1746 made an actual survey of this kingdom (which goes under the name of the duke of Cumberland's map), on a very large scale, most accurately pointing out every smallest spot, with the Roman camps, etc., the original in the office of ordnance. He reduced it, and engraved a few for presents. From his observations the Roman map of North Britain, mentioned before, p. 561, was engraved."³

It will be noted that the final sentence is conclusive: it draws a sharp distinction between the map "engraved for presents" and the map "mentioned before, p. 561", which was the so-called 'king's map'. Attention has already been called to the unfortunate influence exercised by this passage in distorting the facts as to Roy's connexion with the survey, the medium being the obituary

¹ *Op. cit.*, vol. xlix, p. 372.

² *Op. cit.*, vol. ii, p. 561.

³ *Op. cit.*, vol. ii, p. 586.

notice which appeared in the *Gentleman's Magazine*.¹ For the most part the anonymous writer was content to follow his guide blindly. But in one respect his vision was clearer. After copying the misleading paragraph as far as "presents" almost *verbatim et literatim*,² he substitutes for the last sentence the paragraph from p. 561 beginning "Mappa Britanniae Septentrionalis", and connects the two by inserting the words "under the title". He therefore realized that there were not two engraved maps, but only one. We may go a step farther and affirm that Watson and Roy never collaborated either in the drawing or in the reduction of any map of the sort. The so-called 'king's map' is neither more nor less than the earlier 'state' of plate i of the *Military Antiquities*. The measurements given by Gough suggest this at once. The two titles are also in perfect agreement, save only that in Gough "Corinense" has become "Corinensi". Lastly, the map catalogued as 'the king's map' in the British Museum Collection proved, upon examination, to be merely an example of the now familiar earlier 'state'. The Museum authorities had been disposed to attribute it to the years immediately preceding 1760, whereas the true date is, as we know, 1774. The mistake is in all likelihood due to the traditional but erroneous association with Watson, for the establishment of which Gough is alone responsible. Watson died in November 1761, in happy ignorance (we may believe) of the work of 'Ricardus Corinensis', while several of the Roman sites marked upon the map, such as Cleghorn, Torwood Moor, and Grassy Walls, were only discovered in the course of the next decade.

It may be conjectured that the title of 'the king's map', which the engraving had acquired at least as early as 1780, was bestowed upon it because the original was known to be in the King's Library. When did it find its way thither? And why did Roy have it engraved at all? Taking the latter point first, we may dismiss Gough's idea that Roy's action was prompted simply by a desire to be generous to his friends. It is surely much more probable that, when he had put the finishing touches to his book, he made an endeavour to arrange for its publication. On this hypothesis the engraving of plate i would be of the nature of a preliminary essay, some copies of which would quite naturally be circulated privately. When sufficient support for his scheme was not forthcoming, he apparently deposited the more perfect copy of the manuscript in the Royal Library. And, if we have regard to the current of public events, it is not difficult to understand why the time should have proved inopportune for floating a work so expensive. The relations between Britain and her American colonies had

¹ See *supra*, p. 163.

² His main change, it will be remembered, was greatly for the worse: he altered "Colonel Roy of the artillery" into "While colonel of artillery, he", and so started a long train of error.

long been strained. The tension was now extreme. It was in December 1773 that the tea-chests were emptied into Boston Harbour, and by the summer of 1774 it must have been very generally realized that a rupture was inevitable. Roy himself tells us explicitly that the outbreak of the American War meant the indefinite postponement of his long-cherished hopes for a proper Government survey of Britain.¹ We can hardly wonder that the lesser enterprise should have been swamped by the rising tide before it could be launched.

The explanation just suggested fits in admirably with the date at which the volumes appear to have been presented to the king. This we are in a position to determine within fairly narrow limits. The manuscript must still have been in Roy's possession in the early part of 1774, for it was then that plate i was engraved. That it had passed out of his hands before September of that year is plain from the absence of any reference to Towford, as well as from the presence of the grossly inaccurate plan of Chew Green; it is impossible to believe that he would have allowed his *magnum opus* to be transferred to Buckingham Palace² without removing all the blemishes of which he was conscious, particularly as we can prove that, before parting with it, he subjected it to a careful revision. The Appendix will show that one or two improvements were introduced into the text of B. M. after the text of S. A. had been copied from it. Evidence even more convincing is supplied by plate xlv. Fig. 7 is a reproduction of this plate as it is found in S. A. If it be looked at along with the published version, a marked difference in arrangement will be manifest at once. On a closer comparison it will be seen that the difference is due to the fact that, at the beginning of the series of drawings which it contains, there has been introduced an additional representation of 'The Polybian Camp of a Consular Army', designed on the supposition that the auxiliary cavalry attached to a Roman legion were 900 strong, instead of 600 strong only, as Roy had at first assumed. 'Fig. I' of S. A. thus becomes 'Fig. I B', the new-comer being designated 'Fig. I A'. Turning next to B. M., we find that there the diagrams have originally been arranged and numbered exactly as in S. A. Subsequently, however, 'Fig. I' has been altered into 'Fig. I B', while a small square of paper, with 'Fig. I A' drawn upon it, has been laid above, and pasted down along its left-hand edge so that it can be raised and replaced like the leaf of a book.³

¹ *Phil. Trans.*, lxxv, p. 387.

² It was at Buckingham Palace (the old building) that the King's Library (George III's) was housed before its transfer to the British Museum.

³ It must have been at the same time that there was added to B. M. (p. 58) the last sentence of what has become the first foot-note on p. 51 of the *Military Antiquities*. It is not found in S. A. (p. 78), and the reference to the amended illustration is clear.

THE POLYBIAN and HYGINIAN CAMPS compared with each other, and with those of the Greater and Lesser kinds of AGRICOLA, existing in SCOTLAND.

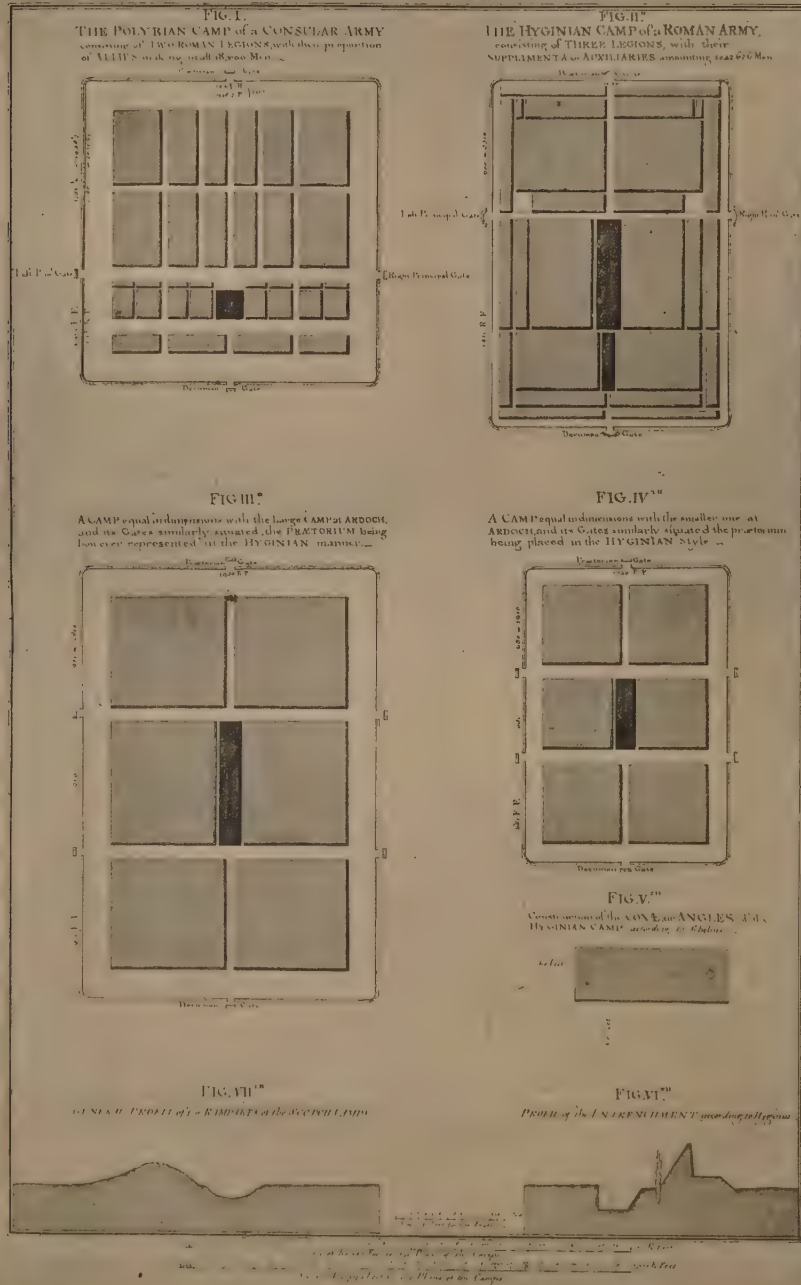


Fig. 7. Original drawing of plate xlv. From the Society's MS.

The complete rearrangement in the published version has been effected by the engraver.

The case for revision, and for revision prior to September 1774, would thus seem to be conclusive. Everything points to the revised manuscript having been transferred to the Royal Library about midsummer of that year. The autumn expedition to Chew Green indicates that Roy's antiquarian zeal was in no way damped by his failure to secure publication. But, when war actually broke out a few months later, his interests and his energies alike would be absorbed by the struggle in which his country was engaged. Agricola had to give way to Washington. Roy did not take the field, doubtless because it was felt that his organizing talent could be more profitably utilized at home. And, when peace was signed in 1783, it was not archaeology but surveying that made the more insistent call on his attention. So far, the parallel with what had happened twenty years before is extraordinarily close. This time, however, there was to be no Roman revival. His measurement of a base-line on Hounslow Heath, undertaken in the first instance for his own amusement, attracted much public notice, the king paying a personal visit to the scene of operations. Shortly afterwards he was commissioned by the Government to triangulate the country between London and Dover, the ultimate object being to determine accurately, in conjunction with a similar French mission, the relative positions of the observatories of Greenwich and of Paris. In 1785 the Royal Society, of which he was a Fellow, awarded him the Copley medal for his work on Hounslow Heath. The area of his survey of south-eastern England gradually extended, and the taking of the necessary measurements kept him fully occupied as long as his strength held out. In November 1789 growing ill health drove him to Lisbon for the winter. Returning in spring, he was faced with the task of seeing the final report on his labours through the press. In July 1790 he died very suddenly, leaving two or three sheets still uncorrected.

During the later years of his life the fame he had won as a geodesist rather tended to eclipse his reputation as an antiquary; and on the whole we may be certain that, if a choice had to be made, this is what he himself would have wished. By the faithful, however, he was still rightly regarded as the leading authority on Roman Scotland. We shall hear shortly of plans of newly-discovered camps being submitted to him for his opinion. He had been elected a Fellow of the Society of Antiquaries of London on 21st March 1776, rather more than a year after the admission to the Society of his old friend General Melville,¹ who had returned from the West Indies in 1771. The existence of the manuscript of the *Military Antiquities* was a matter of common knowledge. A privileged few

¹ Elected 12th Jan. 1775.

must even have been allowed to read it, for, in the private letter of 1788 which has already been referred to, Melville speaks of it as "a very good performance".¹ It is possible that Roy may have looked forward to a day when he would have leisure to revise it and bring it up to date, and in this connexion it is perhaps significant that he should have been careful to keep a copy of the plan of Raedykes in Kincardineshire, which cannot have reached him earlier than 1785. But, if he cherished any such intention, no serious endeavour to realize it was ever made. Otherwise some reference to Towford and to the amended plan of Chew Green would certainly have been introduced into his own copy of the text. It is interesting to reflect that another visit to Melrose might have enabled him to include a convincing confirmation of his conjecture as to the true site of Trimontium. The earliest of the recorded finds of Roman inscriptions at Newstead was made in 1783.² One wonders whether news of it ever reached him.

His will, a copy of which may be seen at Somerset House, gives us an illuminating glimpse of his ultimate attitude towards the *Military Antiquities*, showing that, while he recognized the necessity for further revision, he also contemplated the possibility of posthumous publication. The document is dated 13th November 1786, and the executors are Colonel David Dundas, Quarter-Master-General in Ireland, and Mr. James Livingstone, of Shepperton, in the county of Middlesex. The principal heir and residuary legatee is Ensign Thomas Vincent Reynolds, of the 34th Regiment of Foot, "now in Canada", son of Mrs. Mary Hayes, for whom and for whose daughter, Catherine Hayes, provision is made by means of annuities. Colonel Dundas was, of course, Roy's old colleague in the original survey of Scotland.³ Ensign Reynolds, as we learn from one or two casual allusions in the *Philosophical Transactions*, had been closely associated with him in the measurement of the Hounslow Heath baseline, being responsible more particularly for the plan.⁴ In spite of the absence of any specific statement to that effect in the will, it is natural to believe that he was a relative, seeing that his mother and his half-sister were also provided for. Mrs. Hayes may possibly have been a younger sister or, alternatively, a cousin of Roy.⁵ The relevant part of the document runs thus:

"I request that Colonel Dundas will take the pleasure of a most gracious sovereign with regard to the manuscript map of Scotland remaining in my custody he having

¹ *Proc. Soc. Ant. Scot.*, vii, p. 31.

² Curle, *A Roman Frontier Post*, p. 140.

³ See *supra*, p. 166.

⁴ *Op. cit.*, lxxv, p. 417.

⁵ As already indicated (*supra*, p. 163), the parish register of Carluke records the baptism of two sisters—Grizel (1723) and Susanna (1728). I have not been able to find any trace of a third. But it would be hazardous to deny the possibility of her existence, and it is worth pointing out that, if a

been employed in the execution of that map. I bequeath to Colonel Dundas all my Manuscripts Orderly Books and Drawings relative to Prince Ferdinand's campaigns in Germany as being well qualified to extract something useful from rough materials of that sort. Of the drawings there are several duplicates. When that happens to be the case he can give Ensign Reynolds one copy. I bequeath to Ensign Reynolds my gold watch and also the Gold Medal of the Royal Society whereon my name is engraved. The Books of Antiquities not being yet arranged as completely as it should be I had thought of leaving to the Society of Antiquaries. My executors will do in this respect as they judge best. If at any time the collection should be published the King's copy would be the best to engrave the drawings from."

The upshot of Roy's request was that, as he had himself intended, or at least hoped for, the great map passed into the King's Library, which is now housed in the British Museum. With it there went a considerable mass of other material relating to the survey—some of the original drawings of Roman stations,¹ and two or three reduced copies of the map as originally protracted.² To one of those there is attached a document which is of some interest, partly because it bears witness to the promptitude and thoroughness with which Dundas discharged his commission, and partly because the transaction disclosed may possibly have been the germ whence sprang Chalmers's allegation that Roy's 'Mappa Britanniae Septentrionalis' had been "drawn by Thomas Chamberlain, the skilful draughtsman of the Tower drawing-room".³ Some time before his death Roy had placed in Chamberlain's hands a reduced and coloured, but unfinished, copy of the great map on a scale of 2½ miles to the inch, and had instructed him to prepare a copy of it on the still smaller scale of 6 miles to the inch. When the end came in July 1790, the work was still incomplete. Dundas apparently called in the new copy just as it was, along with the archetype, and added both to the collection before it was moved to Buckingham Palace. This we gather from the document referred to, which is a letter headed 'Tower—

third daughter were born, it would be in accordance with old Scottish custom that she should be given her mother's name of Mary. It may be convenient to set down here the few facts that are ascertainable as to the career of Reynolds, as kindly collected for me by Mr. John A. Inglis. On 13th August 1784 he was gazetted ensign in the 34th Regiment, which had been in Canada since 1782. He became lieutenant in 1788 and captain in 1791. In the latter year he was 'disbanded', remaining on half-pay till 1793, when he secured a captaincy in the first battalion of the 'Scotch Brigade'. Two years later he gained his majority in the 30th (Cambridgeshire) Foot. He was given the army rank of lieutenant-colonel in January 1799, but he continued to serve on the strength of the 30th Regiment as major until June 1801, when he retired. As, according to the Regimental History, he died in the same year, his retirement was probably due to ill health.

¹ See *supra*, pp. 168 and 172.

² See *Catalogue of the Manuscript Maps, etc., in the British Museum* (1844), ii, p. 332 f.

³ *Caledonia*, ii (iii), p. 64. The whole passage is quoted *supra*, p. 164.

Oct. 22, 1789', a patent error for '1790', since Roy is alluded to in terms which show that he was already dead. The text is as follows:

"Mr. Chamberlaine presents his respects to Gen. Dundas and have herewith sent the Plan of Scotland being in five parts which Mr. C. had of the late Gen. Roy—also the Plan in two parts that Mr. C. was reducing therefrom.

There is wanting in the unfinished plan to compleat it sevl Towns Roads and part of the Heights.

The inclosed card shows the proportion the Plans are in to each other."

The executors seem to have been equally prompt in presenting the 'Books of Antiquities' to the Society of Antiquaries of London. The Minutes of Council do not appear to contain any explicit record of their receipt, but under date 9th December 1790 it is noted that "the Secretary was directed to make out a list of the drawings lately presented to the Society by the late Major General Roy". The gift was hailed with an enthusiasm that would have gratified Roy, if he had lived to hear of it. The Introduction was read as a communication to the Society at its ordinary meeting on 27th January 1791, and the reading aloud of other portions of the text provided the staple fare at no fewer than seven other meetings during the remaining portion of the session.¹ The idea of publication must have been mooted almost at once, for on 29th March a committee of four, including the President, was appointed to obtain estimates. On 11th April it was "Ordered: That it be recommended by the Council to the Society to direct the publication of the work bequeathed to them by the late Major-General Roy". Three days later the recommendation was put to the Society and "passed in the affirmative". Estimates had been quickly lodged, and on 5th May the Council decided "That a Committee for examining the estimates delivered in by the engraver and printer, for engraving and printing the work bequeathed to the Society by the late Major-General Roy, and for superintending the publication of the same, be appointed; and that the Committee do consist of the President, Vice-Presidents and officers of the Society, the Rev. Mr. Cracherode, Mr. Lysons, Mr. Barnard, and Mr. Wyndham".

The question of the engravings was settled within little more than three weeks. On 23rd May the estimate for these, which the Committee had apparently succeeded in reducing somewhat, was accepted by the Council, and "the Maps of General Roy were accordingly delivered to Mr. Basire for the purpose of engraving them". The arrangements for printing, relatively a much simpler

¹ These were the description of the Antonine Wall (17th, 24th, and 31st March), the account of the Roads (7th and 14th April), Professor Anderson's Appendix (30th June), and the chapter on Agricola's Temporary Camps (7th July).

matter, went forward in more leisurely fashion. But about a year later a certain Thomas Haynes was "employed to transcribe the MS. of the late Major General Roy, in the course of the Summer".¹ On 3rd July 1792 the Council determined "that General Roy's Book of Military Antiquities in North Britain be printed at the Shakespeare Press", and further "that a Committee be appointed to superintend and direct the printing of the above mentioned work; and that the Earl of Leicester, President, Sir Henry Charles Englefield Bt., Frederick Barnard Esq., John Topham Esq., Thomas Astle Esq., and the Rev. Thomas William Wrighte be named of the Committee". Those who are familiar with the *Military Antiquities* will recognize in this list the names of the Fellows who appear on the fifth page as its official sponsors. If, however, they choose to re-examine that page in the light of the foregoing narrative, they will see that the Editorial Committee had a somewhat easy conscience as to diplomatic accuracy. The alleged extract from the Minutes of Council of 11th April 1791 is not a 'true' extract. Apart from minor alterations, it 'telescopes' into the original resolution of 11th April 1791 decisions that were not arrived at until 5th May 1791 and 3rd July 1792 respectively. At the same time no mention is made of the appointment or the labours of the first Committee on publication.

After the lapse of more than a century these discrepancies, though they remain curious, have lost all practical significance. It is more to the point to note that the Council seem very quickly to have discovered that, while the two manuscripts were to all intents and purposes the same, the collection of drawings which had been received from Roy's executors did not correspond exactly to that which Roy had deposited in the Royal Library sixteen or seventeen years before. On 4th February 1791 it was "Ordered: That the President be requested to make such application, as he shall judge most proper, for permission to have copied such of the drawings in his Majesty's collection, of the late Major General Roy, as are not in the collection of this Society, and at the same time humbly to offer such drawings as are in the Society's collection, but not in that of the King; to be copied for the use of his Majesty". On the 29th March following, the President was able to report that the necessary permission had been obtained, and the Council on the same day resolved "that his Majesty be complimented with the originals of such drawings of the late Major General Roy, as are not at Present in his Majesty's Collection and that Copies of the same be reserved for the use of the Society". But for some reason or another there was considerable delay. Not until a year later (30th March 1792) did the Council order "that Mr. Chamberlain be employed to make copies of those drawings of the late Major General Roy, which are in his Majesty's collection but not in that of the

¹ Minute of Council of 19th May 1792.

Society". Chamberlain was, of course, "the skilled draughtsman of the Tower drawing-room" of whom we have already heard.

The fact that there is still a lack of correspondence between the drawings in B. M. and those in S. A. shows that the scheme of exchange was never carried out in its entirety. Taken along with other indications, it also enables us to form a shrewd idea as to the gaps that would have had to be filled on either side. Thus, it is clear that the Royal Library did not possess a drawing either of 'Rae-dykes near Ury' (plate l) or of 'Re-Dykes near Glenmailen' (plate li). And the explanation of their absence is simple. I have elsewhere¹ gone with some care into the history of both these plans, and have proved that the former was prepared for Mr. Barclay of Ury in 1785 by a land-surveyor named George Brown, while the latter dates from 1788 and is the handiwork of Colonel Shand of Templeland in Aberdeenshire. Neither could have been seen by Roy until twelve or fifteen years after his own collection had been presented to the King. Towards the close of his life they were submitted to him as the leading authority on Roman Scotland. He made a copy of the plan of the Ury camp, and it is doubtless this which is now bound up with B. M., the corresponding drawing in S. A. being Chamberlain's duplicate. On the other hand, there is no copy, in either collection, of the plan of the camp near Glenmailen. It must have reached Roy when he was too busy or too ill to make a transcript of Shand's drawing for himself. We can only suppose that the plate in the *Military Antiquities* was engraved from the original, which was then reclaimed by its owner. A third drawing, which was apparently wanting in the Royal Library, seeing that there is no trace of it in B. M., was that of the plan of 'Tibbers Castle' (plate xlix). An explanation of its absence will be suggested presently.

For obvious reasons it is less easy to determine the extent of the gaps in the Society's collection. But as to one or two of them there is no manner of doubt. Thus the B. M. copy of plate v ('The Polybian system of Castrametation', etc.) has a note in pencil in the margin—"not in the Society's Book". Again, the Minutes of Council of 9th February 1793 record that "Mr. Basire's estimate of thirty guineas for engraving Mr. Chamberlain's drawing of a Sketch of part of the Country along the banks of the River Teme, being Pl. 40 of Gen. Roy's book, was agreed to". It will be remembered that Roy made his drawing of this in the summer of 1772, when the main part of B. M., with the accompanying illustrations, had been already completed,² and when accordingly he had no manner of doubt as to the style that would be most suitable for engraving. This may account for his not having retained a duplicate; his own purposes, whatever they may have been, would be equally well served by keeping, as he

¹ *Proc. Soc. Ant. Scotland*, 1916, pp. 328-31 and 351-4.

² See *supra*, p. 189.

doubtless did, his rough notes and the preliminary draft. Another plate which was unrepresented by any drawing in the collection handed over to the Society was the 'Mappa Britanniae Septentrionalis' (plate i). In S. A. its place is filled by an impression of the later 'state' of the engraving. As the latter is certainly of a date subsequent to Roy's death, it cannot have been among the papers which he left behind him. Perhaps it may have been substituted for the impression of the earlier 'state' now bound up in B. M., which would in that event be one of the "originals" with which the king was "complimented". More doubt surrounds the case of the two maps that immediately follow. Both are now represented in S. A.; but there are indications that both may possibly be copies by Chamberlain. In the 'Mappa|Britanniae|Faciei Romanae|Secundum Fidem Monumentorum. | Per Veterum. | Depicta. | ex Exemplo. | Ricardi Cori- nensis. | Amplificata'¹ (plate ii) the attempt to reproduce the ornamental title² is very half-hearted, as if it had been already decided that the engraver was to ignore it. There is clearer evidence as to 'Albion|et|Hibernia|Britannicae Insulae. | Secundum|Claudium Ptolemaeum, | Ex Exemplo Mercatoris | ampli- ficato' (plate iii). The ornamental title³ is, of course, dispensed with altogether, but this is not of itself very convincing. It is more significant that some important names have been left out, while others have been blundered, and that one of the mistakes—'Legio z Augusta' for 'Legio 2 Augusta'—is of such a character that it could not have been made by Roy, but must be attributed to a copyist.

The blunders and omissions just referred to were corrected in pencil from B. M. by the Editorial Committee before the S. A. copy was turned over to the engraver. The Committee's activity in regard to the plates betrays itself in various other ways. In one instance they took the bold step of rejecting Roy's drawing altogether. Neither the sepia-washed 'View of Duntocher bridge', which he had specially prepared for engraving, nor the earlier water-colour sketch, which is still preserved in S. A., appeared to them to be suitable for reproduction in the book. It may be that the engraver was responsible for advising rejection. At all events, on 19th May 1792 the Council resolved "that Sir Thomas Dundas Bart. be requested to procure a more accurate drawing of Duntocher Bridge on Grimes Dyke, in order to complete the set of drawings of the late Major General Roy of Roman Military Antiquities in North Britain". Sir Thomas Dundas was the younger brother of Sir Laurence Dundas, proprietor of Castlecary in 1769,⁴ and had succeeded to the baronetcy under a special

¹ In the engraving the original title has been amended by omitting 'Per' and also by leaving out the periods. In the 'List of Plates', however, 'per' has been retained (*Mil. Ant.*, p. 207).

² See *supra*, p. 197. Of course there is always the possibility that the title in S. A. may be Roy's rough draft.

³ See *supra*, p. 198.

⁴ See *supra*, p. 186.

remainder in the patent.¹ Why the application should have been addressed to him is fairly clear. In those days it was a long way from Duntocher Bridge to Castlecary, and a still longer one to Kerse, the nearest family seat of the Dundases. But Sir Thomas was at this very time a member of the Society's Council,² and probably his colleagues had an idea that he would be specially interested because of his brother's connexion with plate xxxix of the *Military Antiquities*.³ The response to the appeal was not very prompt, for after the lapse of eight months (25th January 1793) we find the Council ordering "that the Secretary be desired to apply to Sir Thomas Dundas Bart. to know what has been done concerning the drawing of Duntocher Bridge". Sir Thomas, however, would seem to have already taken action, if we may judge from the fact that the engraving in the *Military Antiquities* (plate xxxvii), which is copied from a sepia-washed drawing now in S. A., is dated '1792'. It is signed by Joseph Farington, R.A., the well-known landscape-painter. The original, which lacks title, date, and signature, is considerably larger than the copy.⁴

One of the earliest decisions of the Committee must have been to include in the published collection all the available drawings, irrespective of whether they were referred to in the accompanying text or not. Among the drawings which reached them was that of the 'Plan of Tibbers Castle supposed to have been a Roman Camp' (plate xlix), and they had it duly engraved. There was no corresponding drawing in the King's collection, and the Committee probably supposed that Roy had secured the plan at some time subsequent to 1774. As a matter of fact, the camp called Tibbers Castle was not a recent discovery. Its reputation as 'a Roman Castellum' was as old as Gordon's *Itinerarium Septentrionale*,⁵ and it is therefore extremely unlikely that Roy missed the opportunity of planning it in or about 1753.⁶ He had evidently seen it, for he refers to it in the *Military Antiquities*⁷ as "a square fort, situated in a remarkable pass, near Disdier Kirk". It is also marked in the original drawing of the 'Mappa Britanniae Septentrionalis', but neither there nor in the text is it definitely associated with the Romans. It may be suggested that the "supposed to have been a Roman camp" of the title indicates Roy's first attitude of mind towards the remains, and that, under the influence of a growing know-

¹ The baronetcy dated from 1762. Thomas was created Baron Dundas of Aske, co. York, in 1794, and was the father of Laurence Dundas, first earl of Zetland. I am indebted to Lyon King for this identification.

² He demitted office on 23rd April 1793.

³ See *supra*, p. 187. It is worth noting that Sir Thomas Dundas was in no way related to General Sir David Dundas, Roy's executor, who was the son of a Robert Dundas, a merchant in Edinburgh.

⁴ For details see *infra*, p. 227.

⁵ p. 19.

⁶ See *supra*, p. 168.

⁷ p. 105.

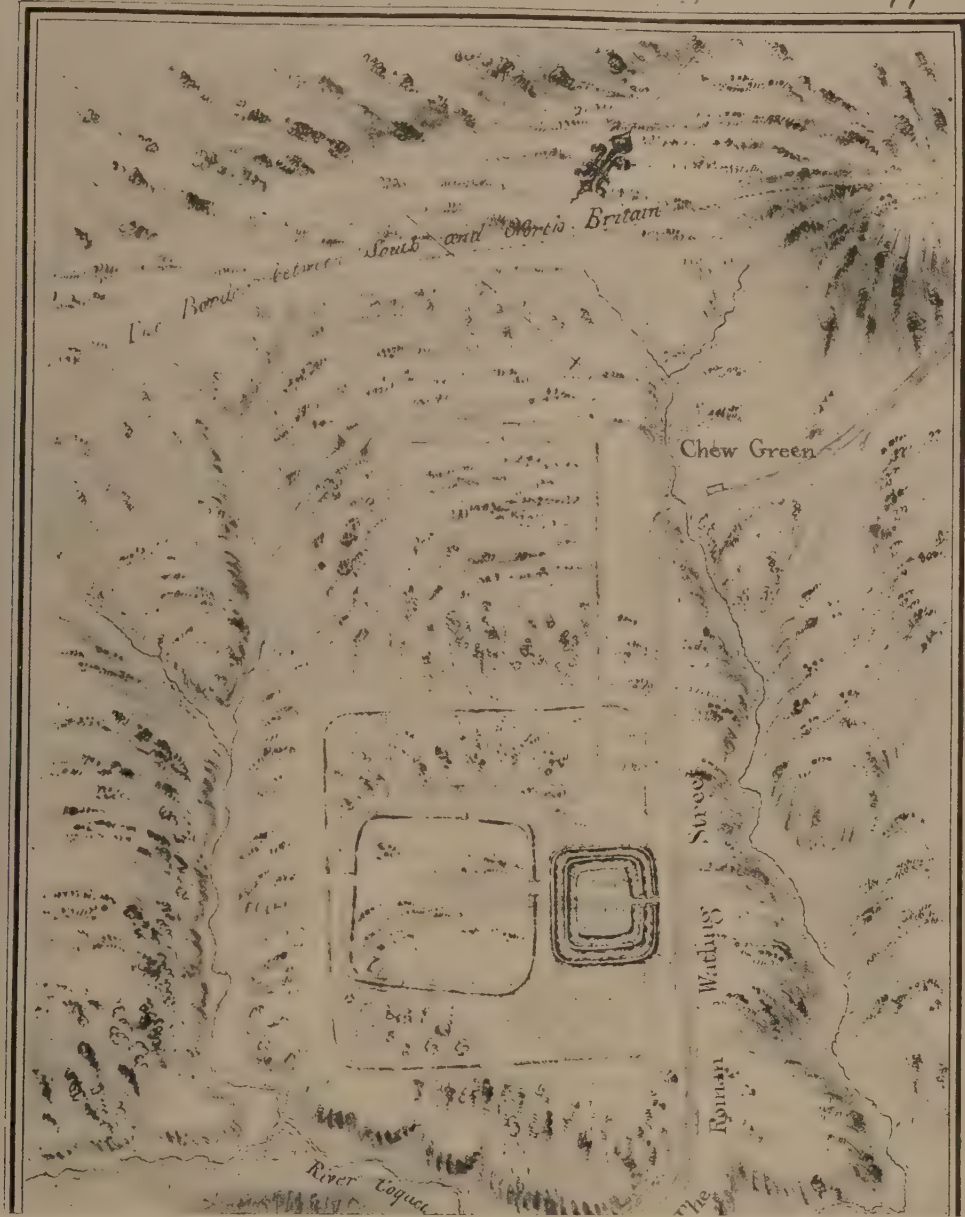
PLAN of the *ROMAN STATION* and adjoining *CAMPS* at Chew Green, on the Head of the River Coquet, on the border between South and North Britain, supposed to be the *FINES* mentioned in Richard of Cirencester.



ORIGINAL PLAN OF CHEW GREEN

From the British Museum MS.

*PLAN of the ROMAN STATION and adjoining CAMPS at CHEW GREEN
on the HEAD of the RIVER COQUET, on the BORDER between SOUTH
and NORTH BRITAIN; Supposed to be the FINES mentioned in
RICHARD of CIRENCESTER. — September 20th 1774*



REVISED PLAN OF CHEW GREEN

From the Society's MS.

ledge of what a Roman camp was really like, his doubt developed into positive unbelief. If this be so, the exclusion of Tibbers Castle from B. M. was the deliberate act of the author, and its subsequent publication was an error of judgement on the part of the Committee. On the other hand, there was every justification for extending the series by adding the plans of Raedykes (plate l) and of the camp near Glenmailen (plate li), although room should certainly have been found for an explanatory note.

The same may be said of the S. A. drawing containing the plan of Towford and the improved plan of Chew Green (plate xxii). Here the policy of silence was peculiarly unfortunate. Not only was the allusion in the text to Towford—that is, to the locality—allowed to stand without any hint of the discovery of the camp being inserted,¹ but (as we have already seen²) the original description was actually left unchanged. The Committee, in short, failed to appreciate the full significance of the S. A. drawing, which they quite rightly preferred to the older one in B. M. A comparison of the two plans of Chew Green, first with one another and then with plate xxii, will bring curious confirmation of the mechanical fashion in which the editorial work was done. Pl. XXIX is reproduced from B. M. Its bold style may fairly be regarded as typical of the series to which it belongs, and a glance at its content will suggest that Roy did well to be suspicious of its accuracy.³ Pl. XXX is from S. A. Here too the style is typical. The contrast is worth observing, as is also the greater *prima facie* probability of the outline of the entrenchments. The special points to be noted, however, are that pl. XXIX shows two entrances to the multiple-ditched fort, whereas pl. XXX shows only one, and that in pl. XXIX the more westerly of these entrances is exactly opposite the gap in the rampart of the large camp adjoining. If plate xxii, as printed, be next consulted, it will be observed that, so far as this part of the plan is concerned, the engraver has forsaken the guidance of S. A., which in all other respects he follows implicitly. That is, he represents the multiple-ditched fort as having two entrances instead of one, while at the same time he makes the gap in the rampart of the adjoining camp much wider than it is in the original. The intervention of the Committee is obviously responsible. In S. A. the second entrance to the multiple-ditched fort has been pencilled in, as can be seen from pl. XXX, if closely scanned. Not realizing that the one plan was intended to supersede the other, the Committee have treated them as complementary, and in their endeavour to effect a reconciliation have succeeded in lending the weight of Roy's authority to one of the mistakes that he was

¹ *Mil. Ant.*, p. 102, where a brief foot-note was all that was required. Another foot-note ought to have been appended to the first paragraph on p. 61, pointing out that the addition of Towford had brought up the number of camps in the "first set" from four to five.

² *Supra*, p. 200.

³ See *supra*, p. 167, foot-note ⁴.

anxious to eliminate! Their eagerness to bring about an adjustment also led them to tamper with the opening into the adjacent camp. But the pencilled lines by which they meant to indicate that it should be brought farther down have been misunderstood by the engraver, who has simply widened it.

Definite pencilled directions "to add" occur on various B. M. drawings, wherever indeed the Committee deemed it desirable to introduce into the book any feature that was found in B. M. but not in S. A.; but nowhere else is there serious blundering, if we leave out of account the fundamental mistake of taking S. A. as a basis at all. As a matter of fact, the strictly limited interpretation which the Committee read into their remit was an effective protection against positive error. They evidently regarded the text as almost sacrosanct, while even in the case of the plates they only once ventured upon independent action. This was in dealing with the 'Mappa Britanniae Septentrionalis' (plate i), on which they decided to mark the sites of the three camps whose plans they were adding to the series embraced in Roy's original collection. They had Roy's authority, as expressed in the titles, for describing Towford and Raedykes as 'Agricolan'. In the absence of any such definite indication of his view, they did not commit themselves so far in regard to the camp near Glenmailen: they called it simply 'Roman', although there is no reasonable doubt but that Roy himself would have put it to the credit of Agricola. The plate, of course, was already in existence, having been engraved by Cheevers in 1774. It was not included in the bequest to the Society, but passed with the residue of the estate into the possession of Ensign Reynolds. Subsequently, however, it was handed over as a gift, to be used for the purposes of publication. That is the meaning of the note which appears below the title in the later 'state' of the engraving.¹ Like the other additions, it was doubtless the work of Basire. Reynolds, it may be added, had returned from Canada, no longer an ensign, probably in 1789 when the 34th Regiment was brought back, but certainly before the beginning of 1792, on 24th January of which year the Council of the Society ordered: "That leave be given to Capt. Reynolds, Capt. Bisset and Dr. John Lorimer, to inspect the MSS. of the late Major Gen. Roy, and the drawings in the hands of the engraver, agreeably to the request of Lt. Gen. Melvill."²

The mention of Melville in this connexion suggests an inquiry as to why his name does not appear on either of the Committees of supervision; he was

¹ See *supra*, p. 194. Some proofs must have been struck off after the new sites had been inserted but before the note was added, thus constituting an intermediate 'state'. The only example I have seen is in a bound copy of the *Military Antiquities* now in the Map Department of the British Museum (460. G. 11).

² It is not without interest to note that the minute concludes "and likewise to Geo. Chalmers Esq.". It must have been on the evidence picked up then that Chalmers founded his charge against the Society of having paid more heed to 'splendour' than to 'accuracy': see *supra*, p. 164.

a Fellow of the Society and, from the point of view of knowledge of the subject, there was no one so well qualified to act as editor. The reason for his exclusion was, however, a compelling one. He had become totally blind about 1789, the result of injuries received during the successful attack on Guadeloupe some thirty years before.¹ Notwithstanding his infirmity, he seems to have taken an active interest in the project of publication. On no other hypothesis can we account for the solitary instance in which the Editorial Committee assumed the responsibility of emending or adding to the text of the *Military Antiquities*, as they had received it from Roy's executors, or as they had found it in the King's Library. The following are the facts. Page vi of the 'Prefatory Introduction', as printed, has two foot-notes, both referring to Melville. In the first he is spoken of as "lieutenant-general", a description for which there is no authority either in B. M. or in S. A.,² as indeed there could not well be, seeing that his promotion dated from 1777, three or four years after the manuscripts had been finally revised. The second directs attention to the "circumstantial narrative" which he had recently (1789) contributed to Gough's *Camden*, and takes the opportunity of making two "small corrections" which "having been sent too late for the press, were omitted". This latter foot-note is wholly new. There is nothing to correspond to it in either manuscript, and it must have been under Melville's own inspiration that it was introduced as a means of recording trifling *errata* in his "circumstantial narrative".

We gather from the Minutes of the Society's Council that three years had originally been allowed for the engraving of the plates.³ Progress, however, was more rapid than had been anticipated. Before two years had elapsed the Editorial Committee were beginning to feel that the end of the whole enterprise was well within sight. This is evident from the terms of a report which they drew up on 21st February 1793:

"The Committee appointed to superintend the printing the work of the late Major General Roy, and the Engravings belonging thereto; and to report to the Council the most advantageous method of publishing that work; beg leave to state, that the Council having come to a resolution to print the letter-press at the Shakspeare printing office, they had several meetings with Mr. Bulmer the Manager of that office to consider of the size and kind of Paper to be used for the same, and at length, gave directions to Mr. Bulmer to procure the paper to be made by Mr. Whatman according

¹ *Scottish Historical Review*, vol. xiv, p. 125. He survived until 1809, being at the time of his death, with one exception, the oldest general in the British army.

² See *infra*, p. 222.

³ The drawings were handed over to Basire on 23rd May 1791 (see *supra*, p. 210). That the engravings were not expected to be ready until May 1794 is plain from the penultimate sentence of the report quoted immediately below.

to a specimen agreed upon as to dimensions, and fineness, at a certain price viz £3. 17. 0 p^r. Ream.

That in making the Paper, the weight of it proved somewhat greater than was expected; and from an increase of the price of the articles used in making it during the last Summer, the price of the paper was raised by Mr. Whatman 2s. p^r. Ream, viz to £3. 19. 0 p^r. Ream.

That the Paper for the plates was understood by the Committee to be the same as that used for the letter-press, but upon trial by Mr. Basire and Mr. Hixon the Plate Printer additional sizeing for that paper was recommended. This occasioned an increase of Weight, and consequently an increase of price, and the charge for that paper now made is £4. 16. 0 p^r. Ream, and the whole amount for the paper is £605. 0. 0, which exceeds the sum estimated by the Committee about £45. They cannot, however, help expressing themselves to be perfectly well satisfied with the paper adapted both to the letter-press and the copper plates (specimens of which they now lay before the council), and have confident expectations that the beauty and Elegance of the work will give general satisfaction; and will amply repay in its price for sale, the additional expence in the charge for paper.

The Committee further beg leave to report to the Council that the most minute and accurate comparison hath been made by Mr. Topham and Mr. Wrighte between the drawings of the late Major General Roy which were presented to this Society and the Copy preserved in his Majesty's Library; and the smallest variations have been adopted in the engravings. The greatest part of the description for the letter press hath likewise been attentively collated and corrected by them; and the remainder will be compleated as soon as the transcript thereof shall be finished. They also correct and Revise the sheets of the Letter-Press and the impressions of the Plates; so as to render the work as perfect as possible. And from the industry used by Mr. Basire in the engravings, and the exertions made in the printing, the work is in that state of forwardness, that the Committee have well founded hopes that it will be ready for delivery to the Members of the Society early in May next, which is a year short of the time allowed by the council to Mr. Basire for engraving the Plates.

All which they submit to the consideration of the Council."

The foregoing report was approved in its entirety by the Council on 22nd February 1793. It is, therefore, the second of the two documents which the Editorial Committee profess to quote on the fifth page of the *Military Antiquities*. Comparison will show that in the act of 'quotation' very considerable liberties have once again been taken with the official record. But the report is interesting chiefly for the light it throws upon the cost of producing the *Military Antiquities*; it tells us exactly how much money was spent upon the paper. It will be remembered that the estimate for engraving plate xl¹ was thirty guineas. From another entry in the Council's Minutes² we gather

¹ See *supra*, p. 212.

² Under date 16th April 1793.

that the corresponding estimate for the view of Duntocher Bridge (plate xxxvii) was sixteen guineas. And on three occasions¹ the Council orders a payment of £100 to the engraver. The first two of these payments are specifically called 'advances'. Even the third by no means represents the final settlement. From the fact that it was not made until the whole of the work was done, one might be disposed to conclude that it was the last instalment. But it is said to be "on account", and besides, a total of £300 would mean an average of only £6 per plate, whereas the estimates for plate xxxvii and plate xl were sixteen and thirty guineas respectively. Unfortunately, no other figures are available in connexion with the illustrations. The position as regards the printing is even more obscure, since the charge for it does not seem to have been recorded as a separate account. The paper is thus the one item in regard to which we are fully informed. At first sight the outlay upon this strikes one as extraordinarily large, so large as to suggest the possibility of its having covered the printing too. From an expert calculation, however, it would appear that, at the stated price per ream, £605 worth of paper would be required for an edition of 700 or 750 copies of the book,² and we shall find that in all probability that was about the number actually issued.

On 16th April 1793 the Editorial Committee were able to report to the Council that their task was completed, and that "they apprehend that a sufficient number of Copies may be ready to be delivered to the members, on Thursday the 2d of May next; and that the General publication may commence on Thursday the 16th of May". The Council approved the report, and ordered announcement to be made accordingly. Every contributing Fellow who had paid his subscription to the 25th of December 1792 was to be entitled to receive a copy in sheets. For an extra half-crown he could have it stitched in blue paper "in the manner in which the *Archaeologia* is delivered to the Members", and for two shillings more he could have it half-bound. According to the list printed at the end of the *Military Antiquities*, this would account for 513 copies. The Honorary Fellows, who were doubtless included in the distribution, would absorb another sixty. In addition, nine were presented, the recipients being the King, the Queen, the British Museum, the Royal Society, the University of Oxford, the University of Cambridge, Roy's two executors, Dundas and Livingstone, and his heir, Captain Reynolds. The surplus copies—their number is unspecified, but it may reasonably be supposed to have been between 100

¹ 30th March 1792, 25th January 1793, and 16th April 1793.

² I have to thank Mr. James J. MacLehose, LL.D., for advising me on this point. He adds that the book "is printed, approximately, on an Imperial paper of about 70 lbs. weight per ream. The price of that paper now, in ledger quality, is, according to the last list I have and which is a few months old, £8 3s. 3d. a ream." To-day, therefore, the paper would have cost the Society about £1,200.

and 200—were ordered to be sold to the public “at the price of five Guineas for each copy in Sheets”.¹ They cannot have been all disposed of immediately. On 26th June 1794 a copy “bound in Russian” was presented to the University of Göttingen. Similarly, on 21st January 1795 a copy “extra bound” was presented to the Pope for the Vatican Library, apparently in response to a request. It seems peculiarly fitting that an example of the *Military Antiquities* should thus early have found a resting-place in Rome. The book as it stands is a worthy monument of one whose enthusiasm as an antiquary was matched by his success as a practical soldier and his distinction as a man of science. And there is a singular attraction about the personality that shines through his pages. The concluding words of the ‘Prefatory Introduction’ are admirably characteristic:

“Improvements of every kind advance by slow degrees; and it is not until the first hints have been communicated to, and examined by many, that they are gradually brought nearer to perfection. Though in these Essays some new lights will be thrown on the temporary castrametation of the Romans, and the ancient geography of North Britain, yet there may still be found room for improvement. Some points the author may have mistaken entirely; and, in endeavouring to establish others, he may have leant too much to the probability of his own conjectures. If, therefore, from future discoveries of Roman works, or the better judgment of those who may choose to amuse themselves in researches of this kind, there should be found reason to depart wholly from, or to alter in any essential degree, his conclusions, the author’s views will be sufficiently answered in having induced others to undertake the subject, and contribute towards its perfection.”

¹ The circumstance that these and other copies were issued loose explains why it is always advisable for purchasers of the *Military Antiquities* to make sure that the set of plates is complete.

APPENDIX

A complete record of the results of the collation of B. M. and S. A. would serve no useful purpose. The following notes are accordingly limited to a brief general description of the two manuscripts, supplementary to that given above, and to a statement of the more important differences between them, particularly those on which the conclusions reached in the foregoing paper are based. References to the printed book are indicated by the abbreviation '*Mil. Ant.*'

VOLUME I (TEXT)

In B. M. the leaf which holds the title-page (fig. 1, *supra*, p. 191) is followed by a leaf on the *recto* of which is: 'To | The King | This Collection | is humbly dedicated | by | His Majesty's | Most Dutiful Servant | and | Faithful Subject | William Roy | Deputy Quarter Master General of the Forces'. These are succeeded by eight leaves, pp. 'i'-'xv' of which contain the 'Prefatory Introduction'. The next four pages, which are unnumbered, hold the 'General Table of Contents', ingeniously arranged so as to show the logical connexion of the whole, and giving references to the pages of the manuscript. Then comes an unnumbered leaf with the title of Book I on the *recto*, and finally the main body of the work on pp. '1'-'263', with '125 a', '126 a', '125 b' and '126 b', and with unpaginated leaves inserted bearing the titles of the books.

S. A. has neither title-page nor dedication. It opens with two leaves, on the first three (unnumbered) pages of which is the 'General Table of Contents', where, however, no references to the pages of the manuscript are given. Thereafter the paging is continuous from '1' to '286', the 'Prefatory Introduction' being called 'Introduction' only, and the leaves which bear titles being included in the numbering. The S. A. original of plate xliii has been bound up *per incuriam* at the end of Appendix II.

The following are typical instances of the kind of evidence that has rendered it possible to determine the chronological relation, etc., of the two manuscripts:

(a) *Mil. Ant.*, p. 129, l. 32, is very instructive. The scribe of B. M. (p. 165) has clearly been puzzled by the unfamiliar word 'septs' in the draft from which he was copying, and he has omitted both it and the 'of' which immediately follows, leaving a blank space. The missing words are filled in in Roy's own handwriting; the 'p' is so characteristic that no mistake is possible, and the ink is also quite different. In S. A. (p. 186) 'septs' is written *currente calamo*. The treatment of 'of' is curious. In B. M. it projects into the margin, the blank space being at the end of a line. In S. A. it is crowded in between 'septs' and the word that follows, different ink being used. It looks as if Roy had accidentally left it out in his original revision of B. M., had noted that it was wanting in S. A., had referred to B. M. once more, and had found that it required to be supplied there also. Otherwise he would have endeavoured to get both words into the blank space which the scribe of B. M. had left for them.

(b) In B. M., up to about Book II, c. 2, foreign words are usually written in the same size of lettering as the rest of the text. When that point had been reached, Roy apparently decided that they should be made very much larger, and this decision is consistently adhered to thenceforward. In S. A. the large lettering for Latin and French words is used throughout.

(c) Similarly, up to the point stated, numbers are generally written in words in B.M., while figures are used thereafter. S. A. employs figures throughout. Thus B. M. (p. vii, foot-note) has 'two or three', where S. A. (p. 7) has '2 or 3'.

(d) In addition to (a) there are several examples of additions or corrections which are made in darker ink in B. M., and possibly in Roy's hand, being written *currente calamo* in S. A. On p. 228 of B. M., for instance (*Mil. Ant.*, p. 180, l. 10), the words "the cohorts were fewer in number than the" have originally been left out: they are inserted above the line in a different hand. In S. A. (p. 250) there is no break in the sense.

(e) The insertion of one or more complete lines that have been accidentally 'dropped' is not unknown even in B. M. (e.g. p. 35), but it is much more frequent in S. A. (e.g. pp. 68 f., 154, 263, 281). It is indicated by the appearance of three or more lines, in the copyist's hand but in smaller characters than the rest of the page, written over an erasure.

(f) A few characteristic examples will serve to illustrate the unintelligent nature of the work of the scribe of S. A. In the following quotations the use of square brackets signifies that the letters or words enclosed have been filled in above the line, on revision, in a different hand, which is almost certainly Roy's own: "[im]perceptibly" (p. 9), "half a [farthing] sterling money" (p. 53, foot-note), "Center of the [country of the] Damni" (p. 178). On p. 196 the blunder 'SALOLINA' has passed undetected; the name is correctly spelt in the corresponding place in B. M. (p. 174).

(g) Mistakes such as those cited in (f) are rare in B. M., although on p. 3 "kine" has had to be corrected into "kind". That B. M. received a final revision at the author's hands after S. A. had been copied from it is placed beyond doubt by the following facts:

(1) *Mil. Ant.*, p. ii, l. 33, reads "obliterated", and with this S. A. (p. 3) agrees. B. M. (p. iii), however, shows an erasure with "levelled" written over it, apparently in Roy's hand. The Editorial Committee have not noticed the improvement.

(2) *Mil. Ant.*, p. vi, foot-note*. B. M. has originally read "Capt. Melvill then of the 25 Regt. since Governour of Grenada". S. A. is identical but for 'Melville' and 'Regmt.' In B. M., however, there has been added later '& M: Genl. in the W. Indies', the entry being in much darker ink. For the significance of this, and for comparison with *Mil. Ant.*, see *supra*, p. 217. (*Mil. Ant.*, p. vi, foot-note †, is not found at all in B. M. In S. A. it is crowded in at the foot of the page in a different hand. It can hardly be earlier than *circa* 1792: see *supra*, p. 217).

(3) *Mil. Ant.*, p. 51, foot-note*. The last sentence does not appear at all in S. A. (p. 78), being found only in B. M. (p. 58). For explanation, see *supra*, p. 205.

(4) *Mil. Ant.*, p. 204. In S. A. (p. 282) there is no signature, and place and date are inserted in the scribe's hand. B. M. (p. 261) has all three, but in a hand quite different from the text. It seems possible that the mention of place and date was introduced before S. A. was copied from B. M., while the signature was not added till the final revision.

(5) In two places in S. A. (p. 78 and p. 268) the number of a plate to which reference is made in the text is left blank. In both passages B. M. (p. 58 and p. 247) has the number duly inserted in darker ink.

(6) As stated *supra*, p. 192, the references to plates and to ancient authors, which appear as insets in *Mil. Ant.*, are not found at all in S. A. In B. M. they have been added in the margin in a different hand and in much darker ink. Probably they belong to the final revision.

VOLUME II (PLATES).

To what has already been said in the way of general description of the differences between the second volume of B. M. and the second volume of S. A., it seems necessary to add only that S. A. has no title-page and no manuscript 'List of the Drawings', the place of the latter being taken by a spare sheet of the printed 'List of Plates' from *Mil. Ant.* Some of the details are, however, so important that it is desirable to take the plates *seriatim*:

PLATE i (*Mappa Britanniae Septentrionalis*). This has already been very fully discussed (*supra*, pp. 200 ff.). It will be remembered that there is no original drawing in S. A.

PLATE ii (*Mappa Britanniae, etc.*). As to the title, see *supra*, p. 213. The suggestion there made as to S. A. being a copy by Chamberlain is to some extent confirmed by the circumstance that the Committee have had to pencil several emendations upon it, e.g. 'Auftrinum' has been corrected into 'Austrinum' and 'Epidiae' into 'Epidia', while 'Hardinii', 'Dunum', and 'Logia Flu.' have been added. The engraver of *Mil. Ant.* has converted 'Logia' into 'Bogia'.

PLATE iii (*Albion et Hibernia, etc.*). While B. M. alone has the title decorated (see *supra*, p. 198, fig. 5), S. A. has it in the upper left-hand corner in a plain rectangular framework, and not above as *Mil. Ant.* That S. A. is a copy made from B. M., either by Chamberlain or by some one else who was unfamiliar with the names, seems quite certain from the large number of emendations made in pencil by the Editorial Committee. 'Rutupia' [*sic*], 'Phileum', 'Vodiae', and 'Mararmanis Portus' have all had to be added, and the following mistakes in spelling corrected: 'Nagnatae Urbs', 'Caturactonium', 'Antivestzum', 'Aqua Calida', 'Legio z Augusta', and 'Moricumbe'. In B. M. the subdivisions of the degrees of latitude and longitude round the margin are alternately blank and shaded, giving the border a chequered appearance. In S. A. they are all blank, as in *Mil. Ant.*

PLATE iv (*Polybian Camp*). No difference of importance.

PLATE v (*Polybian Castrametation*). S. A. is a copy of B. M. by Chamberlain: see *supra*, p. 212.

PLATE vi (*Channelkirk*). B. M. and S. A. differ from *Mil. Ant.* in having the plan placed upright on the page, so that it can be looked at without turning the book round. In other respects S. A. agrees with *Mil. Ant.*, both having title and scale (single) in inset in lower right-hand corner. In B. M. the title is above the drawing, and the scale (double) is beneath it, while the space thus vacated is occupied by the following note: "This Camp is the only one of the kind hitherto discovered in the eastern communication, and has been supposed to contain one Division, or about half of Agricola's Army, which accordingly had been supposed to advance in two Columns. This however may be thought a doubtful point. For as there is ground sufficient for a large Camp If [*sic*] the single existing Gate, instead of belonging to the side, was that usually found in the end, the Camp might have been of the large kind extending southward to the brow of the Hill that overlooks the River Lauder. On this supposition the Camps in the Western Communication must be considered as those occupied by a Division of the Army that had returned southward on some future occasion." A pencilled direction in the margin, by the Committee, says "to add". But this has not been done, either through an oversight on the part of the engraver, or because it was timeously observed that the whole point of the note was destroyed by the subsequent discovery of Towford. Incidentally we have here a further proof that B. M. left Roy's hands before September 1774 (see *supra*, p. 202). Minor differences are that B. M. has 'Oxton Water' as against 'Oxton Burn', and 'Turn^{pk}. Road from Edinburgh' as against 'Turnpike Road to Edinburgh'.

PLATE vii (*Torwood Moor*). S. A. agrees with *Mil. Ant.* B. M. omits the date '1769', but

has the scale double. Instead of 'River Annan', it has 'Annan River' written in the opposite direction.

PLATE viii (*Tassies-Holm, etc.*). While S. A. agrees with *Mil. Ant.*, B. M. has double scales, and has the title divided into two parts, the second coming immediately above the plan to which it refers. The subsidiary titles are, of course, dispensed with, and the words 'to which is annexed' omitted.

PLATE ix (*Cleghorn*). B. M., S. A., and *Mil. Ant.* are in general agreement here, except that in B. M. the scales are placed beneath. This is one of the very few drawings that have a double scale in S. A.

PLATE x (*Ardoch*). B. M., which has a double scale, omits the date, and also the name 'Kier Burn'. Otherwise there are no important differences of detail, although the names sometimes read in opposite directions. (On the original drawing of this in the King's Library, l. 79, 2 a, the name 'Lindum' is naturally not used.)

PLATE xi (*Dealginross*). Apart from the usual contrast of colouring and detail, there is virtually no difference except a trifling one in the arrangement of the titles of the scales. (The original drawing in the King's Library, l. 79, 3, is very like S. A., except that the small sketch of the gateway is inserted in the upper left-hand corner. It is entitled 'Plan of the Roman Camp at Dalginross near Combrea Kirk in Glenearn', and has the signature 'surv^d 1755 by Will. Roy'. The name 'Victoria' does not appear.)

PLATE xii (*Grassy Walls, etc.*) The stylistic contrast between B. M. and S. A. is very marked here, the names being much more prominent in the former. The title is enclosed in a large wreath-border, and placed, inside the framework, north of the river, in the large space shown as moorland on lower right-hand side of S. A. In the upper left-hand corner, within a triangular framework of branches and foliage, is a double scale, and beneath it, "N.B. The camp was discovered and this Plan was made August the 21st 1771".

PLATE xiii (*Battledykes*). Besides the usual difference in style, the only points calling for remark are that B. M. is undated, and that it has a double scale.

PLATE xiv (*Keithick, Kirkboddo, and Lintrose*). While S. A. and *Mil. Ant.* are in virtual agreement, the arrangement of the two lower plans in B. M. is entirely different. Kirkboddo is placed horizontally beneath Keithick, and Lintrose horizontally beneath Kirkboddo, more ground being shown to left and right on each, so as to make them extend the same distance across the page as Keithick, and the names being at the same time turned through an angle of 90°. Room for the change is gained by dispensing, in all three cases, with the narrow border at the top, containing the title, and by transferring the title to the body of each plan. The scale is double, as is usual with B. M., and extends to 2,100 ft.

PLATE xv (*Roman Castrametation, etc.*). There is no material difference here.

PLATE xvi (*Birrenswark*). *Mil. Ant.* is closely copied from S. A., but omits the name 'Watling Street a Roman Way', which is there attached to the road in the lower left-hand corner. B. M. calls the road simply 'The Roman Way', but the Editorial Committee have deleted 'The' in pencil, and inserted in the margin 'Watling Street a'. Clearly, therefore, the engraver is responsible for the omission. It should be added that the scale in B. M. is double.

PLATE xvii (*Kreiginthorpe and Reycross*). *Mil. Ant.* agrees generally with S. A., except that the words 'Roman Camp' do not appear in the body of either plan in the latter. They have been borrowed from B. M. In several other respects the latter differs markedly from S. A., the changes representing a considerable improvement. While the position of the two plans is reversed, Kreiginthorpe being on the left and Reycross on the right, the scale in each case is about one and a half times as large, proportionately less ground being shown. At the same time the marginal titles are omitted and the common title done away with, an

independent title being placed immediately above each plan. As usual, a double scale is given.

PLATE xviii (*Inchtuthil*). B. M. differs from *Mil. Ant.* and S. A. in having the title and the scale, which is double, placed in the inset in the centre below, instead of merely the (single) scale. Further, they are surrounded by an ornamental border of shells and palm-branches. The inset in lower left-hand corner is the same in all, except that in B. M. the scale, which is single here also, is placed between plan and section.

PLATE xix (*Ardoch, etc., and Fortingaul*). There is general agreement in respect of Fortingaul, except that B. M. and *Mil. Ant.* have 'a Ditch', 'a Stone', and 'a Stone' at three points where S. A. has merely marks. It is otherwise with the plan showing the relative positions of Ardoch, etc. There B. M. and S. A. differ widely, B. M. omitting as irrelevant one or two names that figure in S. A., and adding quite a number of new ones ('Glnabriccan', 'E. Dealgin Ross', 'Dealgin Ross, Camp of the 9th Legion', 'Victoria', 'Inverpafry', 'Hierna', 'Grinnan Hill', 'Lindum', 'Kaims Castle', etc.). These latter have been transferred by the engraver, sometimes blunderingly, from B. M. to *Mil. Ant.* Finally, B. M. introduces a 'Scale of 4000 yards' between the two scales of miles found in S. A. and *Mil. Ant.*

PLATE xx (*Strathmore*). B. M. represents a very great advance upon S. A. in respect of clearness. Not only is the shading much bolder and more distinct, but a good many irrelevant names have been omitted. At the same time a few new names have been inserted, e.g. 'Skirt of the Grampian Mountains', 'Gothlaw Hill', and the description 'Agricola's Camp' for two of the three enclosures. A 'Scale of 11,000 yards' has also been added between the two scales of miles. *Mil. Ant.* adheres generally to S. A., but adopts some of the new names from B. M.

PLATE xxi (*Eildon Hills*). S. A. corresponds to *Mil. Ant.*, except that there is no blank space between the two drawings, which are separated only by a marginal line common to both, the title of the view of the Eildons being placed beneath this line, i.e. on the sky. In regard to this matter of arrangement B. M. agrees so far with S. A., but it has the title of the view of the Eildons placed below, outside the framework. Beneath the lower title is a 'Scale of 3000 yards for the Map of the Country'. Further, B. M. omits one or two names like 'Toftfield' and 'Brimerside' (= Bemersyde), and inserts 'Road from Selkirk'.

PLATE xxii (*Chew Green, etc.*). The very important differences that betray themselves here have already been discussed. It has only to be added that, while S. A. agrees exactly with *Mil. Ant.* in the matter of arrangement, the plan of Chew Green is on the left hand in B. M., and the plan of the Pass through the Cheviots on the right. A pencil note on the margin of B. M. says "Border Line omitted", i.e. from the plan of Chew Green. As a matter of fact, the difference of scale is the reason for its exclusion, as can be seen by comparing pl. XXIX and pl. XXX, *supra*.

PLATE xxiii (*Liddel Moat*). The only variation between *Mil. Ant.* and S. A. is that the former adds 'to Netherby' after 'Roman Way'. In B. M. the plan has been turned completely round, thus bringing the points of the compass into the conventional position and making the river appear above the Moat instead of below it. The sections have naturally been transposed from right to left to suit the altered position of the plan. At the same time they are more carefully and artistically finished, and are separated from one another by a marginal line. The road is called 'Roman Way from Netherby'.

PLATE xxiv (*Birrens*). S. A. corresponds generally to *Mil. Ant.* But 'Section on the line AB' is omitted, and the line AB is not shown at all on the plan. Further, the actual section is much deeper and has originally had no shading at the right-hand side. The shading has been added in pencil by the Committee from B. M., and a pencil line drawn with a ruler, cutting off the superfluous portion of the section so as to bring it into agreement with B. M.

The plan in B. M. shows about 100 more Roman feet on the left side, and differs slightly as to the details of some of the interior buildings. The scale, which is double, is placed beneath the framework of the whole.

PLATE XXV (*Lower Annandale*). S. A. corresponds generally with *Mil. Ant.*, except that the latter borrows the names 'Blatum Bulgium' and 'Birrens' from B. M. The superior clearness of B. M. is very marked, as is usually the case with 'general maps'. It also shows a double scale of feet (Roman and English) between the two scales of miles, and has the description 'Agricola's Camp' attached to the entrenchment on Torwood Moor. The spelling 'Birrengaul Moor', as against 'Berngaw Moor' in S. A. and *Mil. Ant.*, is noteworthy.

PLATE XXVI (*Castle O'er*). S. A. and *Mil. Ant.* are in agreement. In B. M. the points of the compass (which are placed in the lower right-hand corner) have a quite different orientation, the N. and S. line being upright instead of inclined towards the right; erasures show that the orientation was originally the same, and the difference therefore is deliberate. Again, both of the sections are carried right across the breadth of the enclosing framework, and the upper one is designated *CD*, the lower one *AB*. Lastly, the scale is double.

PLATE XXVII (*Castledykes, and Environs of Lanark*). B. M., S. A., and *Mil. Ant.* agree generally as to the uppermost of the two drawings. In the lower one, besides the usual differences, B. M. has 'Castle Dykes, a Roman Station', and the description 'Roman Camp' attached to Cleghorn, neither of which is found in S. A., although the former appears in *Mil. Ant.* The title, while still in the lower left-hand corner, is within a slightly ornamented border, and the scale is called 'Scale of 2000 yards for the Map of the Country'.

PLATE XXVIII (*Lyne*). No differences seem worthy of note here, except that B. M. has a double scale.

PLATE XXIX (*Camelon*). S. A. is identical with *Mil. Ant.*, except that 'a Roman Station' has been borrowed from B. M. In B. M., however, the connexion of the description with Camelon is quite clear, whereas in *Mil. Ant.* the addition is made in small letters and in such an unintelligent fashion that its full bearing is not at once obvious. Instead of 'Old Course of the Carron', as in S. A. and *Mil. Ant.*, B. M. has 'The Carron has formerly taken its course along the foot of the Bank'; and, instead of 'Roman Way leading from the Wall through Camelon towards Stirling and Ardoch', it has simply 'Roman Way from Alauna', written in the opposite direction. The scale is double.

PLATE XXX (*Ardoch*). *Mil. Ant.* differs from S. A. only by borrowing 'Praetorium' from B. M. The latter has the scale double, and has 'Praetorium' in fairly large letters, but shows none of the other names. (l. 79, 2 b in the King's Library is a similar plan, entitled 'Plan of the Roman Post at Ardoch in Strathallan', and signed 'Will. Roy, July, 1755'.)

PLATE XXXI (*Posts near Ardoch*). The only difference here is a difference of arrangement. In B. M. the six drawings and sections, which are grouped together in S. A., are moved apart so that each becomes independent of the other. At the same time the common title is done away with and a separate title placed above each of the three left-hand compartments. In the case of the three on the right hand the titles are placed above, but within the framework in each case. (l. 79, 2 a of the King's Library, which is unsigned and undated, but which may nevertheless be confidently attributed to Roy and to 1755, has on one and the same sheet a drawing which is clearly the original of plate x, and to the right of it the three plans of plate xxxi, so arranged that Kaim's Castle is at the bottom instead of at the top. The whole sheet has the general title 'Plan of the Roman Posts and Camps near Ardoch in Strathallan'; no sections are shown.)

PLATE XXXII (*Strageth*). *Mil. Ant.* is obviously modelled on S. A. The latter, however, has only a single section. This is the horizontal one; but it is unlettered, and there is no

dotted line upon the plan to indicate its position. An 's' has been added in pencil to 'Section' in the title. S. A. is also without 'Roman Way from Lindum to Orrea', which has been transferred to *Mil. Ant.* from B. M. In B. M. the plan is turned round 90° so as to be upright on the page. It has a double scale, and has transverse lines for sections, lettered as in *Mil. Ant.* The sections beneath, however, are arranged $\begin{smallmatrix} AB \\ CD \end{smallmatrix}$, not $\begin{smallmatrix} CD \\ AB \end{smallmatrix}$.

Rather less of the streamlet that flows N. in the lower right-hand corner is marked. (l. 83, 3 of the King's Library, which is entitled 'Plan of the Roman Post at Strageth near Inverpeffery in Strathearn, July 1755', and is signed 'Will. Roy', is the original of S. A. The correspondence is almost exact, except that the single section is lettered *AB* and its position indicated by a line on the plan, while the scale is placed between the plan and the section.)

PLATE xxxiii (*Burghead*). S. A. is practically the same as *Mil. Ant.* B. M. occupies rather less space on the page, owing to a reduction of the amount of sky shown in all three compartments. The double scale for the plan is placed, not below the whole, but in the lower left-hand corner of the uppermost compartment, on the sea, its place beneath being taken by a double scale for the sections.

PLATE xxxiv (*Moray Firth, etc.*). It is plain from the relief that S. A. has served as the basis of *Mil. Ant.* But many details have been introduced from B. M.—the line of longitude, the parallel of latitude, a number of names, e. g. 'Willie Wakum and Spadilingum, Large Cairns, etc.', 'Entrance into Cromartie Bay', 'Sands of Cubin', etc. It is worth noting that, while *Mil. Ant.* has 'Forres' in the title and S. A. 'Forress', B. M. agrees with the 'List of Plates' in spelling 'Foress'.

PLATE xxxv (*Antonine Wall*). *Mil. Ant.* has been copied from S. A., but omits 'July' before '1755' in the title, although the name of the month is found also in B. M. One or two additional names occur in B. M., and have been introduced thence into *Mil. Ant.*, e. g. 'Newlands', which is inserted in pencil in S. A. A smaller sheet is used for S. A.

PLATE xxxvi (*Arthur's Oon*). See *supra*, p. 199. S. A. is a water-colour drawing. The lower half bears the title 'Plan of Arthur's Oven Vulgarly called Oon', and has no lettering inside the dotted circle. *Mil. Ant.* takes the title (inserting 'the' before 'Top') and the legend inside the dotted circle from B. M., but leaves the scale single as in S. A., although it is double in B. M.

PLATE xxxvii (*Duntocher Bridge*). To what has already been said regarding the three drawings for this plate (*supra*, pp. 213 f.), it has to be added that the engraver, while following generally the guidance of Farington's sketch, has reproduced only the central part of it. Consequently the engraving measures no more than 14" × 10", while the drawing measures 19½" × 13". The figures of a man and a woman standing on the bridge have also been omitted.

PLATE xxxviii (*Auchendavy Altars, etc.*). There is no difference of importance between B. M., S. A., and *Mil. Ant.*

PLATE xxxix (*Castlecary Bath, etc.*). Again there is no substantial difference except in the title, where *Mil. Ant.* follows S. A.; see *supra*, p. 187, foot-note 2. But there are two blunders in S. A.; the uppermost sub-title has 'raisedy', which is corrected in pencil into 'raised by', while in the scale for one of the plans (fig. 2 d) 'Roglish' for 'English' is left uncorrected.

PLATE xl (*River Teme*). As has been mentioned above (p. 212), S. A. is a copy of B. M. by Chamberlain. The differences are, therefore, insignificant.

PLATE xli (*Hyginian Castrametation*). S. A. has all the superior finish which characterizes the B. M. drawings of this class, whereas B. M. is in the style generally associated with S. A.

drawings of a similar kind. There has clearly been an accidental interchange. The interchange took place, however, before B. M. was placed in the King's Library at all, for both drawings are numbered in red ink, this being the only instance of such numbering in S. A.

PLATE xlii (*Hyginian Camp*). No special remark is called for here.

PLATE xliii (*Hyginian Camp*). In S. A. the place of the drawing is occupied by a printed sheet, while the drawing is bound up in vol. i (see *supra*, p. 221).

PLATE xliv (*Polybian and Hyginian Camps*). The drawings have been sufficiently discussed above (p. 205).

PLATE xlv (*Polybian Camp*). S. A. and B. M. are distinguished only by the usual stylistic differences.

PLATE xlvi (*Netherby Bath*). S. A. corresponds to *Mil. Ant.* A reproduction of B. M. will be found in pl. XXVII, *supra*.

PLATE xlvii (*White Catherthun*). S. A. agrees with *Mil. Ant.*, whereas in B. M. the 'Plan' is placed above the 'View', not beneath it. Further, the scale in B. M. is double.

PLATE xlviii (*Brown Catherthun*). There is general correspondence between all three here, but the scale in B. M. is double.

PLATE xlix (*Tibbers Castle*). Not represented in B. M.: see *supra*, p. 214.

PLATE l (*Raedykes*). S. A. is probably Chamberlain's copy of B. M.: see *supra*, p. 212.

PLATE li (*Glenmailen*). Not represented either in B. M. or in S. A.: see *supra*, p. 212.

VIII.—*Roman Roads and the Distribution of Saxon Churches in London.* By
REGINALD A. SMITH, Esq., F.S.A.

Read 21st June 1917.

THE two centuries after the official withdrawal of the Romans from Britain are almost a blank in the history of the capital, and it is only fitting that the Society of Antiquaries of London should discuss any new evidence of the city's condition during that period of transition. The picture has indeed been painted by a master-hand, but even John Richard Green's arguments are weakened by certain inconsistencies, and archaeology may be called in to give precision and completeness to his plan of Anglo-Saxon London.¹ 'That this early London', he writes, 'grew up on ground from which the Roman city had practically disappeared may be inferred from the change in the main line of communication which passed through the heart of each. This was the road which led from Newgate to the Bridge. In Roman London this seems to have struck through the city in a direct line from Newgate to a bridge in the neighbourhood of the present Budge Row. Of this road the two extremities survived in English London, one from the gate to the precincts of St. Paul, the other in the present Budge Row. But between these points all trace of it is lost.' For the Roman road shown in his map as crossing the Walbrook at Budge Row there is indeed more warrant than he was aware of. The road has been actually found near its middle point, and the Saxon churches along it suggest that it had not been obliterated in the centuries before the Norman Conquest. Elsewhere Green himself asserts that the roads survived the supposed desolation wrought by the Teutonic invaders of the pagan period. 'After all his slaughter and pillage, the Englishman found himself in no mere desert. On the contrary, he stood in the midst of a country, the material framework of whose civilization remained unharmed. The Roman road still struck like an arrow over hill and plain. The Roman bridge still spanned river and stream.'²

Mr. Lethaby's view of Alfred's London is that the Roman city to a large extent continued to exist, and the streets were still maintained by the new

¹ *Conquest of England* (1899), ii, 169, and foot-note, p. 173.

² *Making of England* (1897), i, 168.

population. 'Here was a Roman basilican church, while in another place would be found one of timber and thatch. When a church is distinguished by being called a stone church (like St. Magnus), it is evident that others were less substantial.'¹

Whatever the exact date of the Roman walls of London, it is clear that the city of the fourth century was as extensive as that of the sixteenth; and one would have expected some reference in history to its systematic destruction, if such a disaster ever befell it at the hands of the Teutonic invader. Pompeii is perhaps not a fair parallel, but the ruins of Timgad, for example, in North Africa, still show the lines of the streets, and it must be remembered that main Roman roads passed through London, and were well maintained during the occupation. Though the ruins may well have been quarried for building in the Anglo-Saxon manner, it is reasonable to suppose that the principal roads survived till they were deflected for public convenience or by private encroachment. In any case, it is suggested that the Saxons built their churches with reference to the main roads, which skirted their churchyards and rendered access easy for worshippers.

The present paper is an attempt to show that ecclesiastical foundations of the pre-Norman period owed their position to the Roman road system and the peculiar circumstances of London's evolution from a fishing-village to a metropolis. First, a sketch must be given of the network of roads (fig. 1) suggested, and in part proved, by archaeological discoveries; but as the writer has set out the material evidence in the *Victoria History of London*, vol. i, and more fully stated his conclusions in a paper read to the Royal Society of Arts in December 1910, arguments for the Roman road system need only be given here in outline. The main consideration is the relation between the Saxon churches and the pre-existing roads, and it will be found that the ecclesiastical topography supports an old but rather discredited tradition of another main road through Roman London.

Two principles, commonplace in themselves, have been constantly neglected by those who have published hypothetical plans of Roman London. The first is that Roman roads ran in straight lines unless there was some good reason to the contrary; and the second is that the Romans buried their dead for choice along the main roads outside their cities. With these two clues one can go some way towards a reconstruction of the road system in and near London, with the more confidence as corroboration is often given by archaeological finds.

At the time of the Roman conquest Verulamium was the principal town of south-east Britain, and it is not surprising that the main road from the Kent coast avoids London and goes direct to what is now St. Alban's. The three

¹ *London before the Conquest*, p. 157.

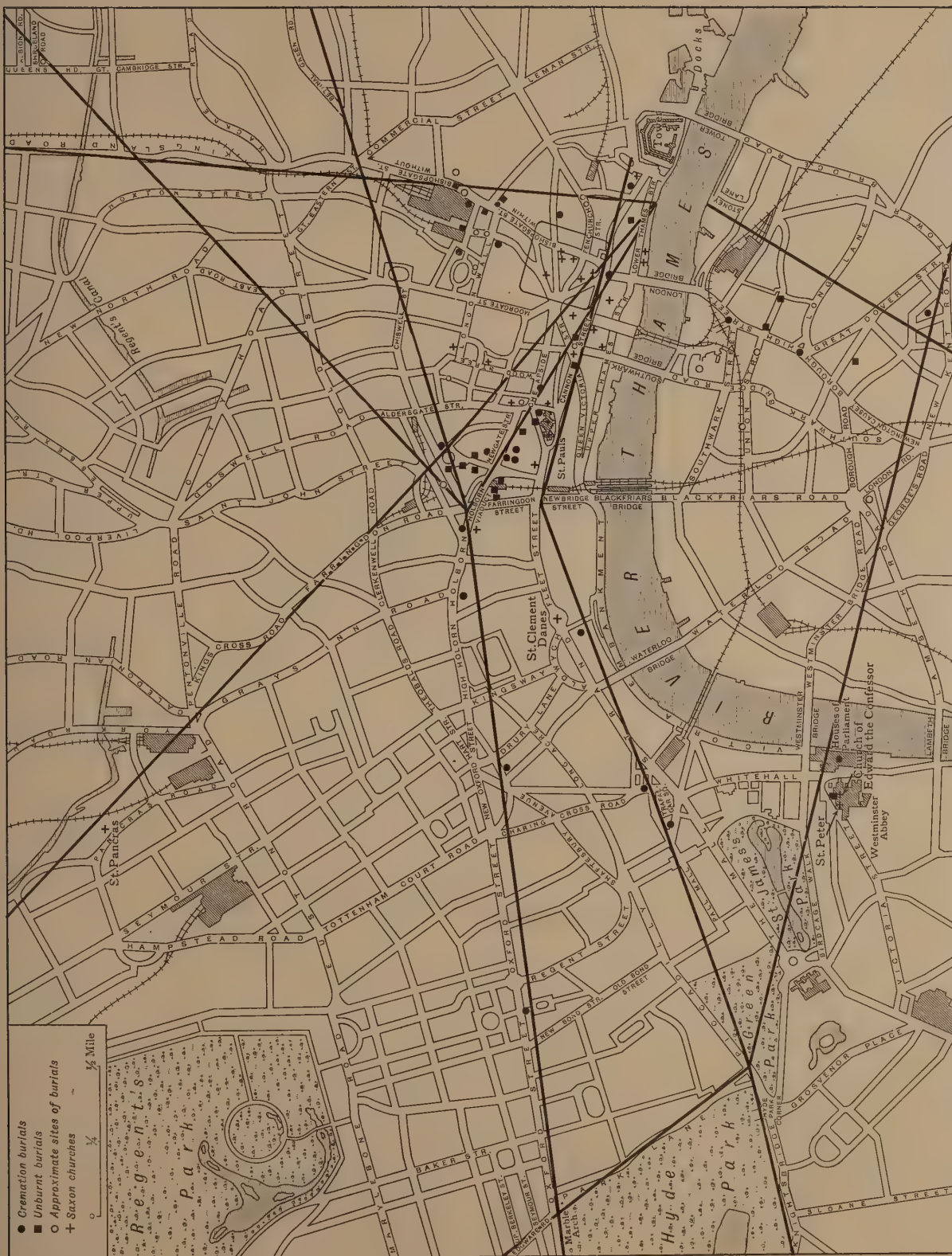


Fig. 1. Plan of Central London, with sites of the Roman burials and Saxon churches, also probable position of Roman roads and camp.
Based on the O.S. Map, with the sanction of the Controller of H.M. Stationery Office.

roads from the ports nearest to Gaul join at Canterbury, and a single line goes, as Higden said in the fourteenth century, 'through the heart of Kent, across the Thames to the west of Westminster, and then to Verulamium'. The words *ad occidentem Westmonasterii* are perhaps ambiguous, but have been mistranslated more than once.¹ 'To the west of Westminster' might mean either that the road crossed the river at a point on the west of Westminster, or that the road passed through Westminster and reached its western side. As the river is due north and south for about half a mile both above and below Thorney, the first interpretation is excluded if the straight line along Shooter's Hill was continued, as Stukeley assures us was the case;² and the second version seems the only alternative. The line would reach Hyde Park Corner, and thence turned north-west, in the line of Park Lane and Edgware Road. The portion between Deptford and Hyde Park Corner is alone open to criticism, and burials at the Deaf and Dumb Asylum and the Dun Cow (Old Kent Road),³ at Deveril Street (a Roman cemetery north of New Kent Road), and the sarcophagus at Westminster all flank this line, and no burials have been found marking out any alternative route. Moreover, the name Stangate (equivalent to Stone Street) at Lambeth suggests an ancient paved approach to the river.

Another Roman road, of which the existence and direction will not be questioned, if continued in a straight line from the nearest existing stretch of it, would meet the Thames close to Stoney Street, which, in view of Stangate, may be more than a coincidence. This road from Chichester is deflected a little north of Dorking by Box Hill, but can be traced to-day for a considerable distance up and down hill on Leatherhead Downs, and was evidently complementary to the Ermine Street north of the Thames, which was constructed by the Romans some time after the publication of the Antonine Itineraries (named probably after the Antonine emperor Caracalla, A.D. 198-207). The point where this road reached the Thames is easily calculated by prolonging the line of Kingsland Road southward; and is found to be on the east side of the present Custom House, the Stane Street reaching the bank immediately opposite. The conclusion is that this was the lowest crossing of the river, and the site of a Roman bridge, nearly midway between the present London Bridge and Tower Bridge. The Stane Street crosses the original Watling Street between Deptford and Westminster close to the large Roman cemetery at Deveril Street; and several Roman burials, both within and without the walls, fringe the Ermine Street on the north bank. It may be remarked incidentally that the burials along this

¹ *Polychronicon* (Rolls Series, vol. ii, pp. 46-7); see *Proceedings*, xxiii, 301.

² For traces of the road between Shooter's Hill and Stangate, see Lethaby, *London before the Conquest*, p. 57; and *Surrey Archaeological Collections*, xxviii, 147.

³ The latter is a recent find communicated by Mr. Lawrence, of the London Museum.

line between Bishopsgate and the Thames indicate that the Wall was not built till after the road was constructed, another point in favour of a late date for the fortification of London, as the Romans forbade burials within the walls. Besides the early cremations, there are inhumations within the walls that, according to the rule, would be later than about A. D. 250.

A third main road that will be readily admitted in principle is the east and west route from Colchester to London, on to Staines and Silchester. The continuation of a long stretch west of Romford crosses the Lea at Old Ford, the principal crossing till Bow Bridge was built about the middle of the twelfth century. Not only were there several burials at Old Ford, but the route is practically proved by the discovery, exactly at the crossing,¹ of a large lump of herring-bone pavement, made of tiles cemented together in the ordinary Roman fashion. This probably formed part of the ford paving; and the same line, if continued west of the Lea, would reach the Fleet at Holborn Bridge. A Roman coffin at the west end of Bethnal Green road confirms this route, which will be seen to cross Moorfields, a district that was a swamp all through the middle ages. It is now admitted in most quarters that the swamp was due to the Roman wall ponding back the head-waters of the Walbrook; and the choked gratings made for the passage of the river below the wall have been discovered in modern times. Before the swamp existed this was a Roman burial-ground, and one interment contained a gold coin of Salonina, wife of the Emperor Gallienus (A. D. 253-268). Another coffin of stone has been found in gravel 13 ft. below the present surface between London Wall and Finsbury Circus.² If the Wall existed before A. D. 250, it at least had not at that date held up the waters of the Walbrook. A limit of date in the other direction is furnished by the discovery of two Roman roads, one above the other, during some deep excavations at the junction of Old Street and Goswell Road. The inference is that when Moorfields became a swamp, the Roman road was deflected along the nearest high ground, which is marked by the line of Old Street. Before reaching Holborn the highway passed through a large group of burials at Smithfield, and (with another road to be mentioned presently) crossed the Fleet by a bridge, and so in a straight line to Notting Hill, running a little to the south of High Holborn and Oxford Street. Besides the burials opposite St. Andrew's church, at the Birkbeck Bank and Endell Street, which mark its course with some precision, a cinerary urn in the collection of our late Fellow Mr. Hilton Price³ was found in Harewood Place, between Hanover Square and Oxford Street. The crossing at the Marble Arch was probably provided with a milestone, the 'geometric' stone 'against which soldiers were

¹ Corrected details in *Proceedings*, xxiii, 237.

² Information from Mr. Lawrence, of the London Museum.

shot' just within Hyde Park. It is marked on Rocque's map of 1746, and though now lost was engraved in Latin as it is described as Roman. In 1822 it was covered up, being too deeply embedded for convenient removal, as Wren found to be the case with London Stone after the Fire. The theory that this was the stone that gave its name to the Hundred of Ossulstone (possibly Oswald's Stone) is supported by Mr. Page's researches.¹ Notting Hill, where burials have been found, caused a slight change of direction in the road, but its subsequent course to Staines and beyond is fairly obvious.

The three roads so far considered might be inferred from the map, as many stretches can be identified round London to the present day. There is some archaeological evidence for their course, but as much or more for other roads of less importance, which would hardly be suspected from the maps, and yet may be in some cases earlier than the Roman occupation.

Immediately below London the river flowed two thousand years ago through mud plains covered with water at high tide, firm land being touched only at some of the bends in its course, as at Greenwich and Woolwich. Above the city there are only narrow strips of alluvium, the river flowing between gravel banks and necessarily keeping to a narrow channel.² London therefore was the first spot up the Thames where adequate watch could be kept over shipping from the shore;³ and for military reasons a carriage-way for British chariots was necessary along the nearest dry ground. Such a road might be plotted by the levels on an Ordnance map, and not be very wide of the mark; but the archaeological line gives little room for guesswork. In the first place an ancient Roman highway, which may have had a British predecessor on the brow of the hill, was found in 1833 during alterations for the bridge-approach in what is now Cannon Street, but was then called Great Eastcheap. It was of gravel 16 ft. wide and about 3 ft. below the surface, supported by two walls 7½ ft. high, pointing to London Stone on the west and apparently to Aldgate⁴ on the east, but it was not traced east of Gracechurch Street. Some light has since been thrown on this point (p. 240), but here its westward extension must be considered. A straight line would cross the Walbrook, at a point where remains of a Roman bridge and paved approach constructed of herring-bone tiling have been found over piling. Continuing, the road would coincide with part of Carter Lane⁵ south

¹ *Proceedings*, xxiv, 140 (map on p. 139).

² Whitaker, *Geology of London*, i, 455.

³ According to J. E. Price, the Thames road extended via Thundersley and Hadleigh to Southend (*Arch. Review*, ii, 101), but had to run some distance inland.

⁴ According to Stow (*Kingsford*, i, 28; ii, 274), the Tower gate was the main exit on the east of London till 1190, when it became a postern and was superseded by Aldgate.

⁵ In view of the reputed milestones near St. Swithun's and at the Marble Arch, the suggestion may be hazarded that St. Paul's Stump, a medieval landmark at the angle of Old Change and Cannon Street, was a third survival. It is ½ mile from London Stone. For the Stump, see W. Sparrow

of St. Paul's, and reach the Fleet practically by way of Pilgrim Street. Here no doubt was a ferry, and its course beyond would be lost or at least problematic but for burials in Howard Street, Strand; under the portico of St. Martin's-in-the-Fields; and at the west end of Cockspur Street. Only one line links up these burials, and that line reaches Hyde Park Corner by way of the Green Park on the west, and the Fleet opposite Pilgrim Street in the other direction, incidentally coinciding with the terrace of the Inner Temple. The whole group of buildings is evidently based on that line,¹ while the Strand frontage is ignored; and if the terrace is in fact a remnant of this early highway overlooking the Thames, the curious alignment is easily explained. In 1906 Mr. Montagu Sharpe convincingly argued that Caesar crossed the Thames at Brentford,² where there is now a ferry and good gravel bottom, only channelled in recent years by dredging for the steamers. The existence of a large number of stakes in the north bank is in full agreement with Caesar's own account of the crossing. For him there was only one ford, and that a difficult one, to take him into the territories of Cassivellaunus, and here if anywhere would be a British stronghold, reached by well-kept roads. The supposed road from Brentford to Hyde Park Corner is practically in the same line as the section from the latter point to the Fleet, and in my opinion both belong to a system elaborated by the Early Britons for their own safety and convenience, and probably improved by the Romans.

It is now possible to give a name to this road which in 1910 I had to base solely on archaeological evidence. In the following year Dean Armitage Robinson published a charter of King Ethelred³ confirming to Westminster Abbey five manes which belonged to the church in the time of King Offa. In the recital of the boundaries mention is made of Akeman Street and the boundary passing westward along it to Cyrringe (Charing); and Prof. Skeat points out that Akemannes-ceaster (Bath). It is thus more than probable that our supposed line past St. Martin's-in-the-Fields, St. James's Square and Park, Hyde Park Corner and Brentford was the first Bath Road. The document is interesting not only as containing by far the earliest mention of Charing, but also as identifying Watling Street and Oxford Street; and Mr. Lethaby concludes that 'the whole road from London Bridge to Edgware Road and onward must have been part of the Great Watling Street in Saxon days'.⁴

Simpson, *St. Paul's Cathedral and Old City Life*, 287; Leland, *Collectanea*, i, p. lxxvi; *New Remarks of London* (1732, Company of Parish Clerks), 68.

¹ The Templars migrated here from Holborn in 1184, two centuries after the mention of Akeman Street in Ethelred's charter: the line might easily have been visible at the later date.

² *Arch. Journ.*, lxiii, 25.

³ *Gilbert Crispin*, 167 (Westminster 'Domesday', f. 80 b).

⁴ *Westminster Abbey and the Antiquities of the Coronation*, 12.

The identity of Watling Street¹ in and near London has always been a puzzle; and the most likely explanation to my mind is that the name was applied by the Saxons, not to the original road by way of Westminster (which ignored London), but to the longer and less direct route through London which was preferred when the city became important under Roman rule. And this alternative route can be traced by the occurrence of the name in the city and by its obvious exit at Newgate. Where the historical evidence is weak, the archaeological finds are fortunately abundant and I think conclusive. This alternative route from Deptford to St. Alban's had to cross the river at London, and the site of the crossing is sufficiently indicated by the Ermine Street; and a straight line from the old Custom House to Newgate seems to satisfy all the conditions. It goes diagonally up the steep bank² to London Stone, passing a burial at Crooked Lane on the way, and no doubt crossed the Walbrook by the same bridge as the road just described. Passing between St. Antholin and St. Mary Aldermary, the line coincides with a portion of Roman road discovered in Queen Victoria Street in 1869, at a depth of 10 ft. 3 in. from the surface, 'nearly in a line with the present Watling Street'. Fragments of Roman pottery in it were sufficient evidence of date; and it has also been found in Watling Street itself, along which our line runs for a short distance. North-east of St. Paul's it was apparently flanked by houses of which the wells were found in a row by Wren when digging foundations for the new choir. A similar row of wells abutted on the Roman road in Cannon Street. Remains of Roman buildings and burials are plentiful near Paternoster Square (Newgate market), and a short distance beyond the gate³ the road would have joined that from Old Ford and crossed the Fleet by the same bridge, continuing to the Marble Arch. Oxford Street, at least at its western end, is now known to have been called Watling Street about A.D. 1000, and must have been linked up with the city in Roman times.

The foregoing is a bare summary of the evidence of Roman roads in and round London as it appeared to the writer six years ago, with a few fresh items incorporated all in favour of the scheme; and a glimpse of Saxon London may possibly be obtained by plotting the sites of Saxon churches on a map showing the suggested Roman road system (figs. 1 and 2).

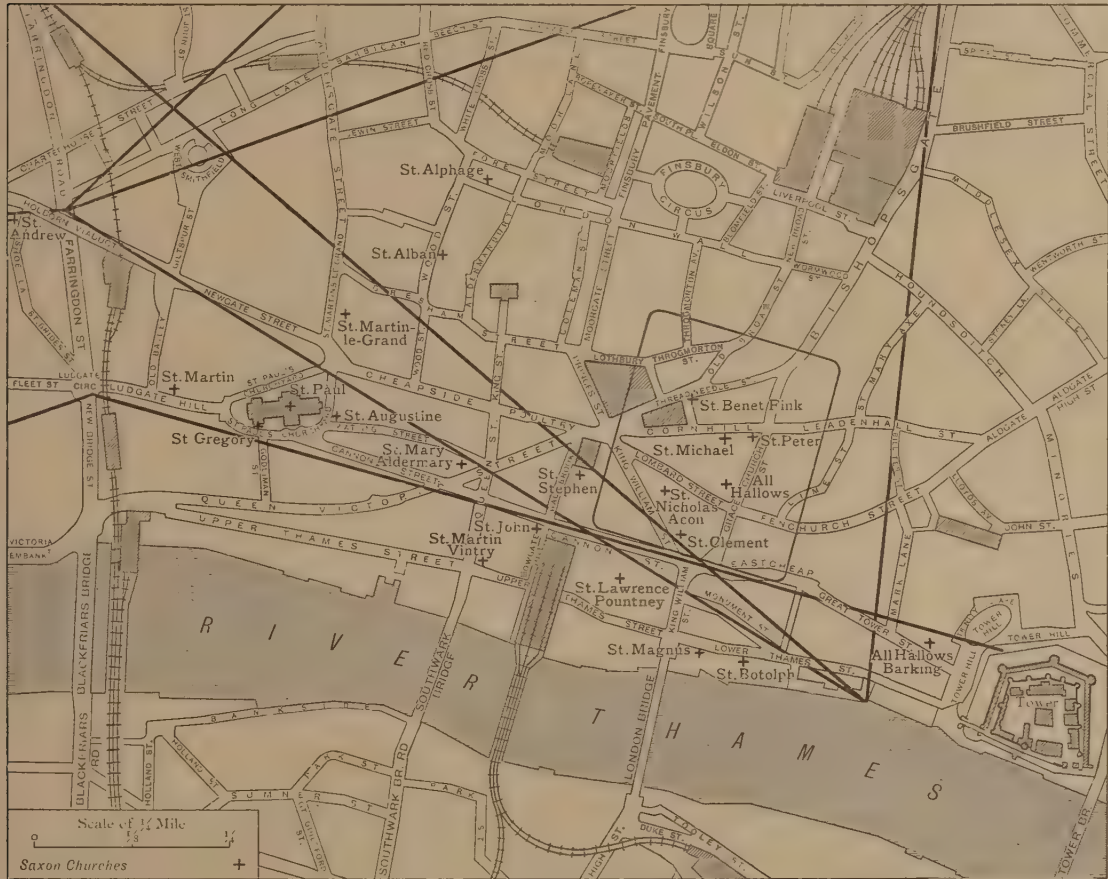
The present paper does not deal with architectural remains of such churches and no claim is made for original research with regard to their history. The list adopted is mainly that given by Mr. Lethaby in his *London before the*

¹ Our Fellow Mr. J. G. Wood considers it a generic name, derived from *gwaith-y-lleng* (work of the legion), and so applicable to more than one Roman road (*Proceedings*, xxiv, 144).

² Possibly held up by the massive walls in Laurence Pountney Lane, mentioned in *Journ. Brit. Arch. Assoc.*, ii, 340, 345; *V. C. H. London*, i, 75.

³ The exact site of this is now known (*Archaeologia*, lxi, pls. xlvii, lvi).

Conquest, and the editor of the *Victoria History* has given useful counsel on a subject in which he is specially interested from the documentary point of view. In some cases the evidence of Saxon date is only circumstantial, but even tradition may have a solid basis; and the discovery of Saxon gravestones in



Finery Walker Ltd. sc., 16 Clifford's Inn, E.C.

Fig. 2. Plan of City of London, showing sites of Saxon churches, and probable position of Roman roads and camp.

Based on the O. S. Map, with the sanction of the Controller of H.M. Stationery Office.

the churchyards of St. John's, Walbrook and St. Benet Fink may be allowed to turn the scale in favour of a pre-Conquest date for the churches.

The following are the Saxon churches to be considered, those in the city being marked on the annexed plan (fig. 2):

St. Paul's Cathedral.
St. Gregory by St. Paul's.
St. Martin, Ludgate.

St. Clement Danes.
St. Peter, Westminster.
The Confessor's Church, Westminster.

St. Andrew, Holborn.	St. Nicholas Acon.
St. Augustine, Watling Street.	All Hallows, Lombard Street.
St. Mary Aldermary.	St. Peter, Cornhill.
St. Martin Vintry.	St. Michael, Cornhill.
St. John, Walbrook.	St. Benet Fink.
St. Laurence Pountney.	St. Stephen, Walbrook.
St. Magnus.	St. Alban, Wood Street.
St. Botolph, Billingsgate.	St. Martin-le-Grand.
All Hallows, Barking.	St. Pancras (near Battle Bridge).
St. Clement, Eastcheap.	St. Alphage, London Wall.

In examining the distribution of these churches it is natural to begin with St. Paul's, which is not only the earliest Saxon foundation in London but a specially good instance of the apparent rule that the Saxons erected their churches for choice along the principal Roman roads in and near London.

There were doubtless many considerations that determined the site of Mellitus's church and monastery in the first decade of the seventh century, and Green¹ has a few lines on the subject: 'The ground given by Æthelberht formed the highest point in the city, and its area corresponds with that of the present precinct of the Cathedral (bounded by Old Change, Paternoster Row, Ave Maria Lane and Creed Lane, and Carter Lane). It was no doubt a spot waste and uninhabited, and thus formed part of the folk-land which was at the King's disposal.' In the late Roman period there were houses in this area, built apparently over a cemetery which must have been in use before the Wall was built;² but there would have been more space here than in the heart of London, where the Saxon churches may have occupied sites consecrated in the Constantine period. In addition to the above advantages it is now clear from our map of the roads that the site had a double frontage,³ the highway from Cannon Street to the Fleet skirting it on the south, and that from the Custom House to Newgate passing on the north-east. Situated in the angle, the church would be a conspicuous object from all parts of the city, as well as to strangers coming from the west along either route; and in the eleventh century its churchyard extended as far as Carter Lane. In 1852 a Viking gravestone (now in the Guildhall Museum) was found during excavations for the foundations of a warehouse for Messrs. Cook, Sons & Co. at the south-east angle of the present churchyard, and consequently close to the presumed Roman road from Ludgate. At a depth of over 20 ft. the sculptured slab was lying on sand, and

¹ *Conquest of England* (1899), ii, 168.

² *V. C. H. London*, i, 6, 22.

³ The north boundary touches, but does not follow, the supposed line of the Roman road; but the close-wall was not built till about 1109, just five centuries after the foundation of St. Paul's (W. Sparrow Simpson, *History of Old St. Paul's*, 62 and frontispiece).

north of it a long hollow was scooped out, containing a human skeleton ; and it is possible that a gravestone carved in the same style (now in the British Museum) came from the same excavation.¹ It should be remarked that Toki, whose name is given in the Runic inscription of the Guildhall stone, was buried north and south, the grave not having the Christian orientation.

A series of Saxon churches in the vicinity seem to be based on this frontage ; St. Gregory's site is now occupied by the south-west angle of the Cathedral ; St. Augustine's adjoins the same road at the west end of (the modern) Watling Street ; and St. Martin's, Ludgate, must have been the first building within the gate.² The alignment of these four³ Saxon foundations is certainly significant, and outside the Wall the same road may have been responsible for the situation of St. Clement Danes in or near Akeman Street (see p. 235).

About 100 yards south of the presumed Roman road through Westminster was the Saxon church which preceded that of Edward the Confessor, and seems to have occupied the site of the west end of the present nave. It existed in the reign of Offa (785) and some foundations have been found under the turf of the North Green.⁴ It is recorded that the monks were not disturbed at their devotions during the construction of the Confessor's church, which occupied the present crossing and two-thirds of the nave.⁵ The Saxon burial, in a Roman sarcophagus with a cross-slab cover of the eleventh century, would thus be between the church and the road, much like the Viking burial at St. Paul's.

Within the city walls, the churches and supposed Roman roads are in places so close together that repetition is at times unavoidable ; but, as in the case of St. Paul's, a frontage on two Roman roads would have been an advantage for a church, and the connexion between church and road becomes on that account more probable.

What may be regarded as the eastward extension of Akeman Street has already four Saxon churches to its credit and, after passing St. Augustine's, leads to St. John Baptist, formerly at the north-west angle of Dowgate Hill, where the head of a standing-cross (now in the British Museum) was found.⁶ A little to the south-west, and about 100 yards from the line of the road, was the church of St. Martin Vintry, for the Saxon date of which our Fellow

¹ *V. C. H. London*, i, 168, figs. 31, 32 ; *Arch. Journ.*, xlii, 252.

² Though Ludgate itself may be medieval, the suggested road implies either an opening in the wall a little to the south (Pilgrim Street), or the existence of the road before the wall was built.

³ Possibly St. Faith's (at the east end of St. Paul's) is a fifth (J. R. Green, *Conquest of England* (1899), ii, 171).

⁴ *Arch. Journ.*, li, 2.

⁵ Superimposed plan in *Archaeologia*, lxii, part i, pl. xiii, p. 94.

⁶ Lethaby, *London before the Conquest*, 168, fig. 33 ; photographs of both faces in *V. C. H. London*, i, 169, fig. 19).

Mr. Page has accumulated evidence.¹ South-east of London Stone, the site of St. Laurence Pountney is about 60 yards south of this road, which passes still closer to St. Clement's, Eastcheap. When the actual metalling was discovered in Cannon Street, it was observed that the line 'pointed apparently to Aldgate'. This vagueness may have been due to the shortness of the piece discovered or to a preconceived notion as to its outlet, Aldgate being the nearest gate in the Roman wall. But the road was probably earlier than the wall, and there are two facts in favour of a continuation of the straight line to the site of the Tower, as shown in the map (fig. 2). A glass amphora, no doubt used as a cinerary urn in the early Roman period, was found at All Hallows, Barking, and according to the Roman rule would not have been deposited inside the city wall if the latter then existed. The favourite site for burials was beside a main road, and the existence of the Saxon church of All Hallows at the same spot leaves the course of the road no longer wholly conjectural. Green suggested that the church and parish marked the locality of a soke or manor which Erkenwald had granted to the monastery at Barking.²

It will now be convenient to notice the grouping of Saxon foundations within the central area that so far has not produced any Roman burials.³ A tentative plan of that enclosure is here given (fig. 2), and everything points to its having been a legionary camp. It is possible to fit in a rectangle with an area of 50-60 acres, based on the road in Cannon Street, and the position would be dry, convenient, and naturally defended. It reached the brow of the steep Thames bank on the south, and had the Walbrook (then a wide tidal river) along its western side; while on the east the ground was low and no doubt marshy, as (according to some authorities) is implied by the name Fenchurch. At its south-west angle stood London Stone, which there is strong reason for considering a Roman milestone; and in the position usually occupied by the head-quarters of a camp have been exposed the foundations of important Roman buildings. These foundations are known to have extended under St. Michael's church on the west and Leadenhall market on the east; and it may be more than a coincidence that above them stands St. Peter's church, reputed to be the

¹ Mr. Page would add St. James Garlickhithe and St. Nicholas Olaf (St. Olaf). The former is on the east side of Garlick Hill, about 150 yards west of the site of St. Martin Vintry, and therefore in the same relation to the supposed Roman road. St. Nicholas stood east of St. Nicholas Cole Abbey, in what is now an open space in Queen Victoria Street at the south end of Friday Street and Bread Street, and not 200 yards south of the Roman road.

² *Conquest of England* (1899), ii, 171.

³ An urn found in Nicholas Lane is incorrectly called sepulchral (*Collectanea Antiqua*, i, pl. xlix, fig. 3). Mr. Burkitt's account of it is as follows: 'It was found about 16 ft. below the surface, in the immediate vicinity of some remains of Roman walls. . . . I removed the contents with care, and found a soft dark soapy substance, probably animal matter, with two bones of some small animal, and fragments of iron and lead, with charcoal and burnt clay.'

oldest in the kingdom, and the central Carfax or cross-roads of the city, where stood the Standard, a medieval fountain from which distances were often measured.

In an article on Roman London¹ based on the *Victoria History*, this view is misrepresented. 'Fortress' is substituted for 'camp', and the 'vast wall-foundations' in Cornhill are said to imply that London was walled before A.D. 60, when it is known to have been an open town. This is a gratuitous addition to the difficulties of Roman London; and it is a fair assumption that when the camp was no longer required for military purposes, it became the nucleus of London. As such it would naturally include the most important buildings, and some at least of the churches which seem to have existed before the official withdrawal of the Romans. York Minster occupies a similar position, on the head-quarters site of an inner Roman camp,² and there is a parallel case at Aldborough, near Boroughbridge, Yorks.³

St. Clement's, Eastcheap, has been already mentioned: north-west of it, between Nicholas Lane and Abchurch Lane, formerly stood St. Nicholas Acon, and 200 yards north of this is the site of St. Benet Fink, which is included in the list of Saxon churches on the strength of a grave-slab, with cross and interlaced panels, found in its churchyard.⁴ St. Michael's and St. Peter's in Cornhill have been already mentioned, and All Hallows, Lombard Street, must be added to the list—a total of six Saxon foundations within the rectangle which is still the heart of the City. Green states in a foot-note that 'the one monument on the west (*sic*) side of Walbrook which we can certainly assign to this period (1016–35) is the church of St. Swithun'.⁵ Whether of Saxon origin or not, St. Swithun's stands, like St. Stephen's, Walbrook, just outside the area in question.

The short road linking up the Thames crossing with Newgate and the great east-and-west road coincides with the present Watling Street for a short distance, and may well have been known by that name in Saxon times. It has been shown to have a sound archaeological basis, and its course is also well marked by Saxon churches. Near the Tower was St. Botolph's church, and a little farther west the stone church of St. Magnus. On the slope of the hill was

¹ *Journal of Roman Studies*, vol. i, p. 149, note 3, commenting on *V. C. H. London*, i, 42, and *Journ. Royal Soc. Arts*, 16 Dec. 1910, p. 123.

² *Yorks. Arch. and Top. Soc. Trans.*, iv, 1 (plan of Ancient York); also in *Arch. Journ.*, xxxi, 248.

³ H. E. Smith, *Reliquiae Isurianae*, pl. iii.

⁴ A restoration is figured by Mr. Lethaby, *op. cit.*, p. 170, fig. 32, whence *V. C. H. London*, i, 170, fig. 34. Mrs. J. R. Green in a note points out that St. Benet's or St. Benedict's recalls the fact that the Benedictine rule first began to make its way in England during Erkenwald's episcopate (*Conquest of England* (1899), ii, 171).

⁵ *Conquest of England* (1899), ii, 178.

St. Laurence Pountney, and at the bridge over the Walbrook, St. John's church. Close to the spot where the actual road was found in Queen Victoria Street stands St. Mary Aldermary, and farther west St. Augustine's, both these being, like St. Paul's itself, between two main roads. The same will presently be seen to apply to St. Martin's-le-Grand; and outside the Wall, St. Andrew's adjoins the road in Holborn.

The evidence of church dedications must always be received with caution, but there is one outstanding fact in London that may reflect the ecclesiastical tendencies of the seventh century. The circumstances in which St. Paul's was founded are well known, and the churches that cluster round it have significant dedications. St. Martin and St. Augustine¹ were honoured both in London and at Canterbury, and St. Gregory's commemorates the Pope who sent the mission to Canterbury. At the west end of the city there was therefore a group of churches closely allied to Rome, and separated by half a mile from the group within the supposed area of oldest London. St. Peter's, Cornhill, was probably not the only Christian church in that area before the Roman officials left Britain, though it is said to be the earliest in the kingdom; and it is possible that the foundations of the Constantine period leaned rather towards the Celtic church, which came into conflict so often with the Roman mission in early Saxon times.

Of the three Saxon foundations that remain to be explained, St. Alban's, Wood Street, and old St. Pancras (north-west of St. Pancras station) may be taken together, and at first sight seem to have had no connexion with any Roman highway. There is nothing inherently absurd in the choice of isolated positions for churches at that date, for there must have been a strong bias towards seclusion; but the outskirts of the city have had a bad reputation even down to modern times, and easy communication with the metropolis was a privilege not to be despised. As both sites are to the north-west of the City's heart, one road may have served both, and its identification will now be attempted.

A line joining old St. Pancras church and St. Alban's, Wood Street, points in one direction to the Custom House and in the other to Hampstead Heath, both positions of interest in connexion with the Roman roads of London. A more detailed examination of this line brings to light certain features, not hitherto interpreted as a whole but presumptive evidence of another ancient highway out of London. The line needs in the first place a little adjustment, as a highway would not go direct from one church to another, but rather pass near them, the buildings standing a little back in their own churchyards; and it will be found that a line starting from the Old Custom House (which, as

¹ St. Augustine's at Canterbury was formerly dedicated to St. Peter and St. Paul; the change was made by Dunstan.

suggested above, was the meeting-place of several Roman roads concentrating on the river-passage) passes a little to the west of St. Alban's church and about the same distance east of St. Pancras, crossing on the way the spot known for centuries as Battle Bridge, but since 1836 as King's Cross. This is a coincidence of some promise, and a production of the line north-west, on reaching Hampstead Heath, practically coincides with the lower part of East Heath Road, skirting an isolated Roman burial of about A.D. 100 a few yards to the west in one of the alleys of the pleasure-grounds formerly attached to Well Walk. This discovery was made in 1774 and recorded in the *Gentleman's Magazine*¹ two years later, fortunately with illustrations of the finds sufficient to give an approximate date. It was evidently a cist-burial after cremation of the body, furnished with a number of pottery vessels and lamps. The nearest Roman find recorded is near Mill Hill, seven lamps having been found with defaced coins in 1769 and reported to this Society;² and it is permissible to conclude that the Hampstead burial owed its position to the proximity of a Roman road. The natural deduction is that the road was in existence about A.D. 100, and we thus have corroboration of the sixteenth-century view that a Roman road crossed the Heath. Those familiar with the neighbourhood will realize the difficulty of continuing the line northward, East Heath Road reaching the flagstaff by a bold curve to the left in order to skirt the Vale of Health. But the physical features were not always as they are to-day, and the gradient difficulty vanishes when it is remembered that in the middle ages and till comparatively recent times the Heath was one of the principal sources of sand for London,³ and the amount of the Bagshot formation that has been removed may be realized by walking along the road from Jack Straw's Castle to the Spaniards. It now seems to be an elevated causeway, but represents the original level of this part of the Heath, the sand having been quarried deeply on either side of it for use by London builders; and the Vale of Health is due to the same cause. The pond there dates only from 1777,⁴ and probably in Roman times the highway continued in a straight course from the lower part of East Heath Road to Golder's Green. This is not mere speculation, for Norden's map of 1593, though faulty nearer London, shows how the road continued till it reached the Watling Street

¹ Vol. xlv (1776), p. 169, 'in one of the Wells Walks'; reproduced in Barratt's *Annals of Hampstead*, p. 4, and in J. J. Park's *Topography and Natural History of Hampstead*, p. 11. This site is now known as Gainsborough Gardens. Two coins of M. Aurelius and Victorinus have also been found on the Heath near Well Walk (*Journ. Brit. Arch. Assoc.*, xxxviii, 216).

² *MS. Minutes Soc. Antiq.*, xi, 109 (4th May 1769).

³ The writer remembers seeing bricks made near the stream that now divides Hampstead and Highgate parishes, the clay being dug on the spot.

⁴ Wm. Howitt, *Northern Heights of London*, 121. When the entire depth of sand is removed, water is held up at the surface by the London clay.

(Edgware Road) at Colin Dale. His one paragraph on the subject is as follows:

Another auncient high waie which did leade to Edgeworth, and so to Saint Albans, was ouer Hampsted heath, and thence to, and through an olde lane, called

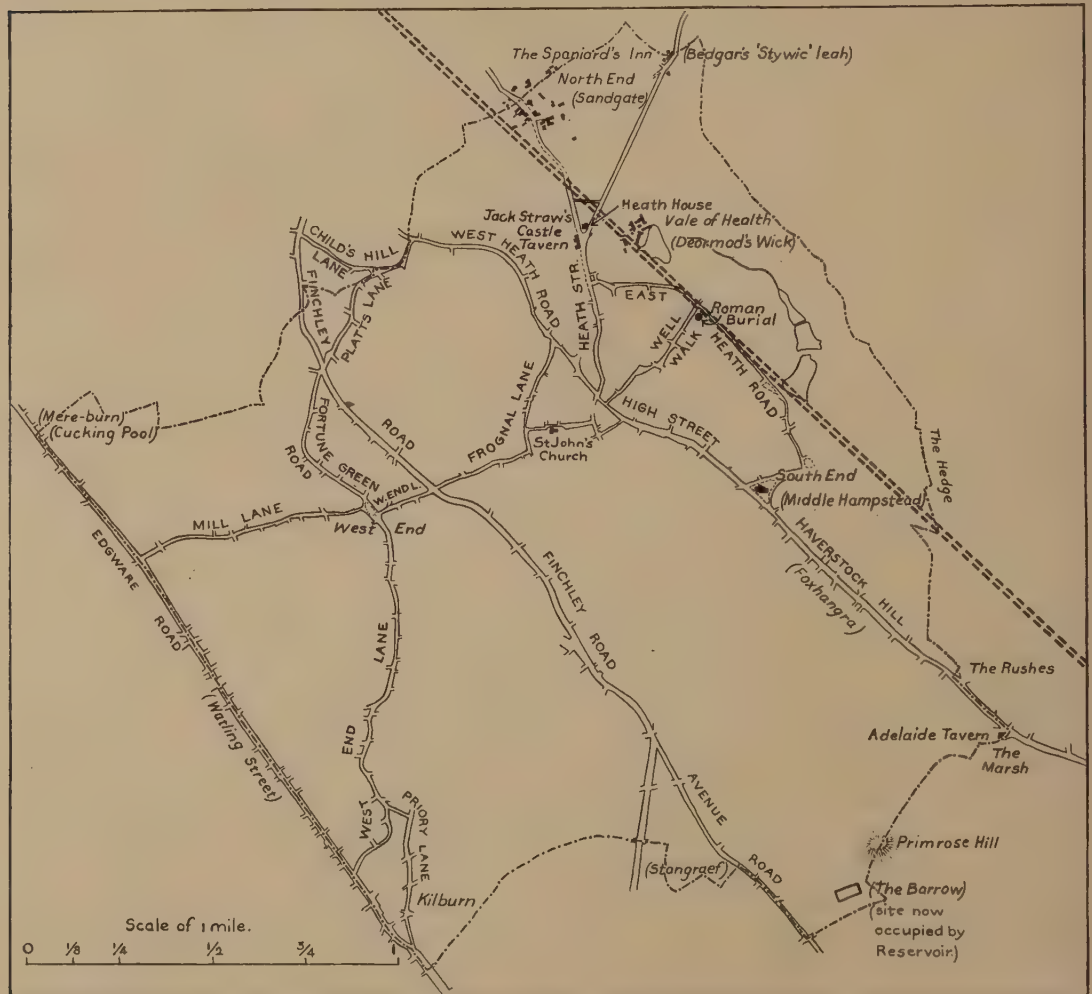


Fig. 3. Plan of Hampstead to illustrate King Edgar's charter (after Prof. Hales), with supposed course of Roman road and burial.

Hendon wante, neere Hendon, through which it passed to Edgwoorth, whence it passed ouer Brokeley hilles, through part of Hertfordshire, by Radnet, Colnestreete, Saint Stephens, and Saint Mychaels, leauing Saint Albans, halfe a mile in the east. This way of some is helde to be Watling streete, one of the fower high waies, which

Bellinus caused to be made, and leadeth (as some affirme) through Watlingstreete in London.¹

Camden shared the opinion that a Roman road out of London crossed Hampstead Heath, but Norden's testimony is specially important as at one time he lived at Hendon,² and may have seen the actual remains of such a road. The following is quoted from the 1607 edition of the *Britannia* (Gough's edition (1806), vol. ii, p. 87):

On the northern edge of Middlesex the Roman road commonly called Watling Street entering this county (Middlesex) from old Verulam leads straight to London over Hampstead Heath, not by the present road through Highgate which was made by licence from the bishops of London about 300 years since; but that ancient one, as is evident from the charters of Edward the Confessor, passed near Edgeworth and Hendon, which archbishop Dunstan gave to the monks of St. Peter at Westminster.

It is at least clear from this that Camden is not referring to what is now generally regarded as the Watling Street; though the modern view is supported by the Saxon charters which call the Edgware Road Watling Street.

In F. E. Baines's *Records of Hampstead* (p. 531) is an appendix by Prof. J. W. Hales³ on Hampstead in the tenth century, accompanied by a map (fig. 3) showing the boundaries at that period. The identification of place-names in the two Anglo-Saxon charters quoted may be open to question in some cases, no less than the authenticity of the charters themselves; but the margin of error is a small one, and the topographical details are not likely to be pure inventions of the middle ages. King Edgar's charter to Mangoda⁴ traces the boundary 'from Sandgate (apparently the modern North End) south along the road to Foxhanger' (identified with Haverstock Hill). This implies that the eastern boundary of Hampstead in the tenth century followed, for at least a part of its course, an old way not to be confounded with Watling Street, which is duly mentioned as the western boundary; and Prof. Hales regarded this way as the main road through Hampstead to Hendon, 'certainly a very old road. Norden and Camden believed that it was a Roman road—that it was indeed the (true) Watling Street. It is quite clear they were wrong'; and there can be little doubt what is meant in the charter.

¹ John Norden, *Speculum Britanniae* (edition of 1723), p. 15.

² E. Walford, *Greater London*, i, 278.

³ See also *London and Middlesex Arch. Soc.*, vi, 560. In the preparation of this and other plans much assistance has been given by our Fellow Mr. Emery Walker.

⁴ Birch, *Cartularium Saxonicum*, iii, 634, no. 1309; Kemble, *Codex Diplomaticus*, vi, 105, no. 1275.

With all respect to Professor Hales's memory, I think Norden and Camden were right except as regards the name. On the theory that the road between Sandgate and Foxhanger is the present main road through Hampstead, the East Heath is left out altogether; and it is possible that the road was really the Roman or even an ancient British way which seems to coincide with the lower part of East Heath Road, and is just where it should be on the present theory.

The line if continued northwards passes east of Jack Straw's Castle, intersects the (modern) cross-roads at Golder's Green, and coincides with Golder's

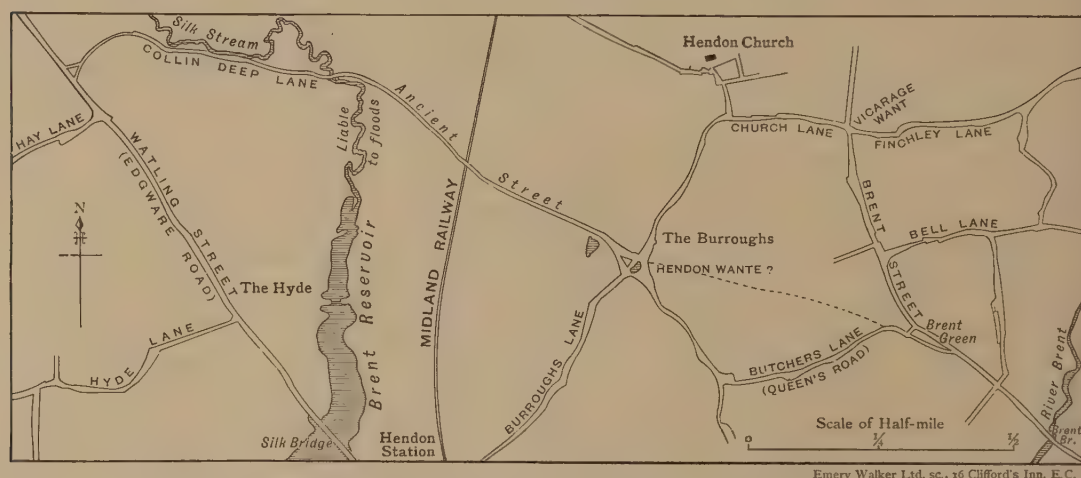


Fig. 4. Plan of Hendon, to illustrate Norden's Roman road: an alternative route from Brent Green to the Burroughs is indicated by the broken line.

Based on the O. S. Map, with the sanction of the Controller of H.M. Stationery Office.

Green Road as far as Brent Bridge (fig. 4); thence it seems to have turned off the present main road by Butcher's Lane (now Queen's Road), and took a curved (or possibly a straight) course to the Burroughs, for that is what Norden evidently meant by Hendon Wante. This is not marked on the manorial maps¹ in the British Museum, which on the other hand show Vicarage Want at the intersection of the main road and Finchley Lane, south of the Vicarage. This suggests that Want is equivalent to cross-roads, and Halliwell gives that meaning to it in the Essex dialect. Hendon Wante must be distinct from Vicarage Want, and the crossing at the Burroughs, the fair-ground of medieval times, can be with confidence identified with the former, which however, according to Norden, included part of the lane. North of the Burroughs the line continues along Colin Deep Lane, which appears on the Ordnance Survey map (6 in.

¹ John Cooke, *Map of the Manor and Parish of Hendon*, 1796 (published by W. Faden); and Francis Wishaw's *Map of the whole Parish and Manor of Hendon*, 1828 (with book of reference).

Middx. xi, 1873) as Ancient Street; and this has been carried over the Midland railway by a bridge and subsequently bears to the left to strike the Edgware Road. Its course was evidently dictated by the Silk stream, which was bridged or forded at a convenient point just north of its expansion into the Brent reservoir (Welsh Harp). The ground south of the crossing is liable to floods.

The ends of our presumed road are therefore fixed. On the north it joins the Edgware Road (Watling Street) $1\frac{3}{4}$ miles south of Edgware, and on the south reaches the Thames at the same point as two other roads, all radiating from the river-crossing. Its course south of Hampstead must now be traced, as there are problems on the way as well as archaeological discoveries that show the line to be anything but fanciful.

Our late Fellow Mr. Waller's map of the rivers of north-west London¹ shows that at the junction of Prince of Wales's Road and Weedington Road, Kentish Town, and southwards for about a mile, the line would practically coincide with the Fleet river, and a good deal of bridging would have been required if no deviation was made from the straight. Such engineering difficulties would not perhaps have daunted the Romans, but may account for the abandonment of this line in the middle ages. Near the east end of Crowndale Road the line would pass definitely to the left or eastern bank of the Fleet, where it would follow high ground almost to Battle Bridge; and it is in connexion with this portion of the route that the supposed flanking camps must be noticed.

Apart from tradition, there are two finds that suggest a main Roman road and camp in this neighbourhood. Mr. E. B. Price discovered in 1842 a portion of a grave-slab to a Roman soldier of the 20th legion among other stones 'placed in front of one of the gardens belonging to a row of cottages erected within these few years in a field on the eastern side of Maiden Lane, Battle Bridge'. The tenant informed him that it was there when he took possession three years before, and that it was doubtless placed there with the other rubbish for the purpose of keeping the entrance to the garden dry, but knew nothing more about it. The field is stated to have been 150 or 200 yards from the mansion (apparently Mountfort House), on the western side of the road leading to the Caledonian Asylum (the modern Caledonian Road).²

The stone was published by Roach Smith,³ who says it was discovered at Pentonville, 'where it had been transported and used as rough paving for a road'; but in *Roman London*, p. 29, he states, eleven years later, simply that it served as a paving-stone before the door of a cottage. The *Corpus*, vol. vii, p. 23, no. 26, gives the date of discovery about two years after its publication,

¹ Loftie, *History of London*, vol. i; from *London and Middlesex Arch. Soc. Trans.*, vi (1883), 272.

² *Gent. Mag.*, Aug. 1842, 144.

³ *Collectanea Antiqua*, i, 130, 135, 139, pl. xlviii A, fig. 1.

and quotes Price to the effect that it was brought there from the City;¹ but that can be little more than a guess. The discovery of a second sepulchral monument in the neighbourhood suggests that a Roman cemetery was not far off, and the former existence of a main road or settlement is at once suspected.



Fig. 5. Plan of Islington in 1805-6, showing supposed head-quarters of Roman camp in Reed Moat Field (after Thomas Starling's map, published 1828).

Gough described to the Society in 1792² a marble bas-relief found by one Milles, a builder, among the ruins of a house at Islington. The date of discovery

¹ This idea probably arose from Roach Smith's description of the stone in his *Catalogue of Roman Antiquities* (1854), p. 4, no. 8: 'Mr. Price could gather no information as to where it came from, but it appeared probable that it was brought from the City or near it for building purposes.' The son of the discoverer (J. E. Price, *Safe Deposit*, 11) states that A. J. Kempe, F.S.A., and his father were in favour of a local origin for the slab.

² *Archaeologia*, xi, pl. ii, p. 48.

is not mentioned, nor that of its removal to the City, where it was fixed up in front of a warehouse in High (or Hith) Timber Street (south of and parallel to Upper Thames Street) near Labour-in-Vain Hill. Gough had heard of it from the Society's Treasurer Mr. Colebrook as early as 1775, and had later searched for the original without success, the house having been rebuilt in the interval. The engraving shows a grave-slab with *retiarius* in a panel, and above in Greek 'Ania Martia to her husband'. It is satisfactory to know that the stone was rediscovered in Tottenham Court Road, and is now in the Guildhall Museum.¹

Mr. Price explained in connexion with his own discovery that until about 1834 there existed a little to the westward of Barnsbury Park the remains of an

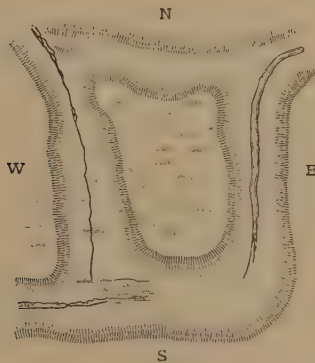


Fig. 6. Plan of earthworks in Reed Moat Field, Islington (T. Allen, *History of London*, 1827).



Fig. 7. Head-quarters of Roman camp, Reed Moat Field, Islington (J. Nelson, *History of Islington*, 1811).

encampment (known by the name of Reed Moat Field), surrounded by a moat upwards of 20 ft. in width and about 12 ft. deep, with an extensive embankment or breastwork thrown up on the western side (fig. 5). This embankment and part of the moat on the west still remained in 1842. Tradition had for ages past assigned this camp to the legions of Suetonius Paulinus, and the engagement between that general and Boadicea in A.D. 61 is supposed to have taken place in the neighbourhood and given its name to Battle Bridge,² which was at the cross-roads of King's Cross, not on the site of the present Battle Bridge over the Great Northern railway.

Another account adds certain details of interest. In 1842 there were slight remains of the camp in the north of Holy Trinity parish, near Barnsbury Park: twenty years previously the camp was in a tolerably perfect state. What was

¹ *Catalogue*, p. 107, no. 4; *Corpus*, vii, p. 21. On the *retiarius*, see *Arch. Journ.*, lx, 319.

² The tradition is not invalidated by the occurrence in Southwark of another Battle Bridge, which is known to have derived its name from the neighbouring town-house of the Abbot of Battle.

regarded as the praetorium was occupied by Mountfort House and grounds (at the west end of Upper Park Street, and about midway between the Liverpool and Caledonian roads). The camp was situated in Reed Moat Field, and 'the site of the praetorium was an exact square of about 200 ft.,¹ the area within the entrenchment being a quadrangle of about 45 yds.: the fosse was about 10 or 12 ft. deep, and varied in breadth from 20-30 ft.'² A survey (fig. 6) was made in 1826 and is reproduced in Thos. Allen's *History and Antiquities of London*, vol. i, p. 15; while Nelson (*History of St. Mary's Parish, Islington*, pl. ii, fig. 2) gives a view of the moated earthwork (fig. 7).

It was further stated in 1859³ that the west work of the camp runs through the gardens at the back and on the east side of Hemingford Road, the south rampart coinciding with the south side of Barnsbury Square; and further precision is given by the mention of Copenhagen House (which was on the site of the central bell-tower in the Caledonian cattle-market) being half a mile farther from Islington.

It may be added that J. P. Malcolm's engraving of the Reed Moat Field (fig. 8), published in 1796 and mentioned by Lewis, is now in the Crace Collection at the British Museum (portfolio 32, sheet 56, no. 160). In the foreground is an earthwork, and in the distance eastward are the parish church, the workhouse, and a single row of houses in the Liverpool (then the Back) Road. The Reed Moat Field was a little north-west of the workhouse built in 1777 near the Back Road opposite Barnsbury Street (fig. 5), the previous building having been three-quarters of a mile farther north, and due east of Copenhagen House.⁴

Referring to a note in the *Gentleman's Magazine*, Dec. 1823, p. 489, a correspondent⁵ remarked that the Roman camp was situated in Six Acre Field 'a little south-west of the new buildings called Barnsbury Park; and with regard to the alleged identity of Battle Bridge and the site of Boadicea's defeat in A.D. 61, an outspoken reviewer⁷ of Nelson's *Islington* pointed out that Bagnigge Wells did not at all agree with Tacitus' description, and suggested 'some narrow valley in Epping Forest, probably near Enfield'.

The theory that the Romans had a camp in Reed Moat Field was held to be substantiated by the discovery in 1825 of arrow-heads and a tile-pavement

¹ A square with sides of 200 ft. was the regulation size of a praetorium (Stuart Jones, *Companion to Roman History*, p. 227).

² S. Lewis, Jr., *History and Topography of the Parish of St. Mary, Islington* (1842), 3, 335 (map at end).

³ *Trans. London and Middlesex Arch. Soc.*, i, 321.

⁴ As shown on Nelson's map of 1735.

⁵ *Gent. Mag.*, Jan. 1824, p. 5.

⁶ This was another name of Reed Moat Field, north-west of White Conduit House (Gough's *Camden* (1806), vol. ii, p. 107; *Bibl. Topog. Brit.*, ii, *History and Antiquities of Canonbury*, p. 3).

⁷ *Gent. Mag.*, Jan. 1824, p. 58.

where the praetorium or head-quarters would have been; and Roman coins and pottery were found in excavating for Mountfort House, but retained by the occupant and lost to archaeology.¹ The tiles formed a pavement 16 ft. square, each being 6 in. square and 1½ in. thick, but were used as road-metal. Their loss is not serious, as most of them are said to have been 'figured', with strange characters upon them, and may have been only medieval; while arrow-heads



Fig. 8. Malcolm's view of the Reed Moat Field, Islington, from the west (1796).

would not be uncommon on land that was largely used for archery in the middle ages.

Lysons mentions² that the moated site in the Reed Moat Field, a short distance north-west of the workhouse, was thought to be the vestiges of a Roman camp; but on the previous page records that in October 1642 the committee of the militia in London gave orders that trenches and ramparts should be made near all the highways leading to the city, as beyond Islington, in the fields near

¹ Hone, *Every Day Book*, vol. ii, p. 1566; Nelson, *History of Islington* (1823), 65 (with map of Islington dated 1735).

² *Environs of London*, iii, 126; for remarks on Stukeley's account of the Brill camp, see same vol., p. 343. The fortifications of 1642-3 are marked on G. Vertue's map of 1738 (*Crace Collection Cat.*, p. 7, no. 39); see *Quarterly Review*, July 1880, p. 58.

St. Pancras church, Mile End, etc. This work was carried on for several months, and may account for the Brill camp which led Stukeley into such extravagances. The Islington camp, however, has claims to be historical that are strengthened by the discovery of two sepulchral monuments (one, at least, of a soldier), and may have been intended to guard the approach to London by Battle Bridge.

A correspondent, T. A. (Thos. Allen), in Hone's *Every Day Book*, vol. ii, p. 1565, had visited 'the site of the undoubted Roman camp at Pentonville, and the conjectural remains at St. Pancras' (Oct. 24, 1826); and with regard to the latter prefers Lysons's view to Stukeley's, which is given at great length in *Itinerarium Curiosum*, ii, p. 1. It is, however, only fair to a former Secretary of the Society to say that the paper was not published in his lifetime, and perhaps was not meant to be taken seriously. It was written in 1758, when 'the praetorium was still very plain over against the church, in the footpath, on the west side of the brook (the Brill, a tributary of the Fleet); the vallum and ditch were visible, and its breadth from east to west was 40 paces, its length from north to south 60 paces'.

Proceeding south the road would have passed by Bagnigge Wells, a popular spa in the late eighteenth century and no doubt appreciated by the Romans. Accidentally or not, about a furlong of the road past Black Mary's (where the first palaeolith was found with mammoth bones) coincides with the course suggested. It is significant that the line serves two watering-places in a distance of $3\frac{1}{2}$ miles, not to mention the minor springs between Gray's Inn Lane and Battle Bridge. At this point notice must be taken of the tradition or guess that the ancient road entered London by way of Portpool,¹ that is by Gray's Inn Road, the manorial name being still preserved in Portpool Lane. It is possible that in Roman or medieval times there was a branch to Holborn Bars where the main east and west road would be intersected; but by comparison with other routes and by discoveries within the walls its continuation in a straight line may be postulated.

The line crosses the Central Meat Market towards the eastern end and after passing over Cloth Fair skirts the west end of St. Bartholomew's church. Without including that foundation in the Saxon list, it is permissible to con-

¹ Park, *History of Hampstead*, p. 9: his authority, Dr. Gale (*Antonini Iter Britanniarum* (1709), p. 64), says by way of comment that the military road from Brockley Hill divided into two branches below Hampstead; one entered London by Portpool and was seen clearly enough at Holborn Bridge when the Fleet channel was cleaned and widened after the Fire of 1666: it went by Watling Street (in the City) to its terminus at London Stone. The other branch ran to the west of Westminster, across the Thames and through the heart of Kent (quoting Higden but reversing his order). But Gale's reasons are insufficient. The Roman road was again seen at Holborn Bridge in 1750, and was required to continue the two roads from the east that joined at that point, but does not by any means indicate that there was a road through Portpool.

jecture that the site was chosen in 1123 as being at the intersection of two main roads, both in my opinion of Roman origin—the road now under discussion and that from Old Ford to Newgate; and as usual in such cases Roman burials were frequent in the vicinity. A large cemetery, not well described, was found under the Meat Market, and at the entrance to Cloth Fair was found an urn containing the cremated remains of a child or youth.¹

The line crosses that of the Roman wall near the angle north-east of St. Martin's-le-Grand, incidentally providing a second frontage for that foundation, and passes within 100 yards of St. Alban's, Wood Street. Several tessellated pavements of houses along this line have been found in Gresham Street (formerly Lad Lane) and Wood Street, with pottery going back to the early Roman period.² The next find that may mark its course is problematical, but worth recording, as further light may one day be thrown on an alleged quotation from Maitland's *History of London*. At a meeting of this Society in 1864, Mr. Alfred White called attention to Maitland's statement that, in digging in Wood Street, they came to the bed of a river and the remains of a bridge, with stone steps leading down to a ford, which he connected with the name of Wood or Wade Street. He therefore considered that there was a water-course in the direction of that street from St. Martin's-le-Grand down to Walbrook.³ Traces of a bridge over the Walbrook were also found at a point where two Roman roads seem to have crossed⁴ near London Stone, and added significance is thus given to other discoveries between these two bridges.

A map of the Walbrook in J. E. Price's volume on the Bucklersbury Pavement shows (in the line of the supposed road) two parallel walls of a drain (marked 10), 2 ft. 3 in. apart, possibly to take off the water of the Wood Street stream along the Roman road. These parallel walls were found with another similar drain above them but 3 ft. wide, and a bridge is known to have existed here in 1291 (*op. cit.*, pp. 49, 66, 67).

A square glass bottle used as a cinerary urn has been found in Milk Street, Cheapside; and a covered urn, evidently used for the same purpose, came from Bucklersbury. Both these finds are on or near the line in question; and the early rite of cremation is quite in keeping with their position, on a high road outside the limits of London at that period. On the road theory these isolated burials thus get confirmation and additional significance.

¹ *V. C. H. London*, i, 7, 126; *Arch. Journ.*, lx, 204.

² *V. C. H. London*, i, plan C, nos. 167-9, pp. 104, 134.

³ *Proceedings*, 2nd ser. ii, 352. A bridge in Wood Street is mentioned by J. E. Price (*Safe Deposit*, 45); but Maitland's statement cannot be traced. Vol. ii, p. 826 mentions a water-course in Cheapside.

⁴ *V. C. H. London*, i, 34.

When the National Safe Deposit Company's premises were erected west of the Mansion House in 1872-3 particular attention was paid to the excavations.¹

At the south-east angle of the triangular island-site a timber-flooring, supported by huge oak timbers 12 in. square and running parallel with the stream (Walbrook), may have indicated a landing-place at this portion of the line. Adjoining this were evidences of a macadamized roadway which extended in a line with Bucklersbury until it reached the apparent course of the brook. Upon the opposite side (of Queen Victoria Street) indications appeared, and the remains possibly indicate a roadway which here crossed the stream.

The Roman remains recovered leave little doubt as to the date of the staging and roadway.

Though the site of the bridge in Wood Street has not been identified, it is probable that our supposed road there crossed a stream that flowed into the Walbrook, and then the Walbrook itself, close to St. Stephen's church, which is known to be a Saxon foundation. A little farther eastward St. Nicholas Acon once stood a few yards from the line, and St. Clement's adjoins it also on the north side. Between this line and the supposed Roman road from the Custom House to Newgate a Roman burial was found in 1831, when St. Michael's church was removed for the construction of the approach to London Bridge, and may be attributed to the first or second century as cinerary vessels were found with two coins of Vespasian.² From St. Clement's to the supposed crossing of the Thames is only 500 yards; and the fact that the bank is reached at that point not only confirms the view that the Romans had a bridge here (probably on the site of a British ford), but to a certain extent justifies the course taken from Hendon and is presumptive evidence of yet another Roman road out of London.

It remains to consider the date of this road and its relation to the Watling Street, which avoided London by going straight from Dartford to Hyde Park Corner and then turned to go as straight as natural features permitted to St. Alban's. This was probably a British trackway before London began to grow and before the Roman invasion; but about the middle of the first century there seems to have been a legionary camp in what is now the heart of the City, and a road would be necessary to link up with the Watling Street at some convenient point north of the river. As the south-east soon passed under Roman control, London probably became a halting-place for troops on the way to the front, and perhaps there was already a British trackway from the ford or ferry (on the site of the first London Bridge) to Verulamium waiting to be metalled

¹ J. E. Price, *Safe Deposit* (1873), 53, with plan.

² *V.C.H. London*, i, 6.

and straightened in the Roman fashion. Both were probably engineered by the Romans in the first century, and, in support of that theory, two at least of the burials along the Hendon route (at Crooked Lane and at Well Walk) seem to date about A.D. 100. The possibility that the battle of A.D. 61 was fought near Battle Bridge is therefore not excluded; and all in favour of the theory is the mention of the twentieth legion on the fragment in the British Museum. That legion and the fourteenth are known to have been represented in the battle between the forces of Suetonius and the Britons under Boadicea.

If the arguments for a third road out of London on the west are upheld, then it becomes desirable to explain the existence, and in all probability the contemporary existence, of two roads to London from Verulamium; and here the historian Dio Cassius may be of assistance. He was born a century after the victory of A.D. 43, which was arranged by Aulus Plautius for the Emperor Claudius; but he probably had access to documents which taught him as much about the British campaign as the ordinary Englishman knows about Trafalgar or Waterloo. Hence the outlines of his story may be taken as correct. After the Romans had crossed a river (apparently the Medway) that the Britons thought would stop them, the latter, he says, retreated to the river Thames where it debouches into the ocean and becomes an estuary at high tide; and easily passing it as they were well acquainted with those parts which were firm and fordable, were pursued by the Romans, who failed to overtake them; but certain Celts—who even under arms were accustomed to swim with ease over the most rapid rivers—again swimming over, and others passing a little higher up by means of a bridge, they attacked the enemy on every side and cut off many; but rashly pressing on the remainder, they wandered into the pathless marshes and lost many of their own soldiers. The story is circumstantial enough to be credited, and there is no doubt about the river being the Thames; but the site of the engagement has been disputed. The problem is to find a short stretch of the river which at one end was just fordable and bordered on the estuary—that is, suddenly spread from a confined bed into lagoons or marshes covered at every tide—and at the other was narrow and shallow enough to be crossed by a native bridge before the Roman occupation.¹

One critic explained that the bridge might have been built by the invading army;² but if so it must have been built in preparation for the battle, hardly during its progress, and if they had been allowed by the Britons to construct it at their leisure, there would have been a strong Roman post on the other bank and the neighbourhood would have been well explored before the battle, to prevent such a surprise as actually took place. A much more tenable

¹ This interpretation was foreshadowed by Roach Smith in *Archaeologia*, xxix, 159.

² *Journal of Roman Studies*, i, 145.

hypothesis is that it was a British bridge built to carry the predecessor of the Watling Street over the river at a convenient spot before London became important or even existed. That the construction of a simple bridge would not baffle the natives is suggested by the fact that in 1846 a man forded the river at this point, as recorded in the *Gentleman's Magazine*. On this theory the dangerous ford would be a little farther down the river; and $2\frac{1}{4}$ miles distant was the Thames crossing near the Custom House. Sir G. B. Airy, late Astronomer Royal, stated half a century ago that the depth of the *foundations* of the piers was good evidence of the depth of the river at old London Bridge; and it appears from a published cross-section¹ that the lowest part of the rubble, on which were laid the wooden sleepers supporting the masonry, was only from two to three feet below low water. It is certain, he says, that this could not be higher than the general bed of the river, and it probably would be lower. Some channels naturally would be deeper than the general bed; and these, when the tide had risen a little, would make the operation of fording very dangerous.

It is therefore not mere conjecture that there was in pre-Roman times a bridge at Westminster and a dangerous ford near the Custom House; and naturally both would be connected with the capital of Cassivellaunus and Tasciovanus. Granted that the Romans subsequently straightened their course and improved the metalling, it is yet arguable that the Edgware Road to Hyde Park Corner and then east through Westminster was the British route to the bridge, and the road through Hendon and across Hampstead Heath was a British track to the ford. The east-and-west road for patrolling the river could be reached by either—at Hyde Park Corner or Eastcheap.

The Catuvellauni were therefore well provided, but what of the Trinobantes, their neighbours on the east? The riparian road could not go in a straight line eastwards beyond the Lea, but may have turned north to Old Ford, some burials south of Old Ford station² and at Upper Clapton suggesting such a continuation. If the Lea crossing there was unsatisfactory in the twelfth century, it is permissible to assume that the Romans (or their predecessors) did not rely on that alone for communication with Essex; and it will be noticed that no provision has yet been made for traffic from London to the north-east.

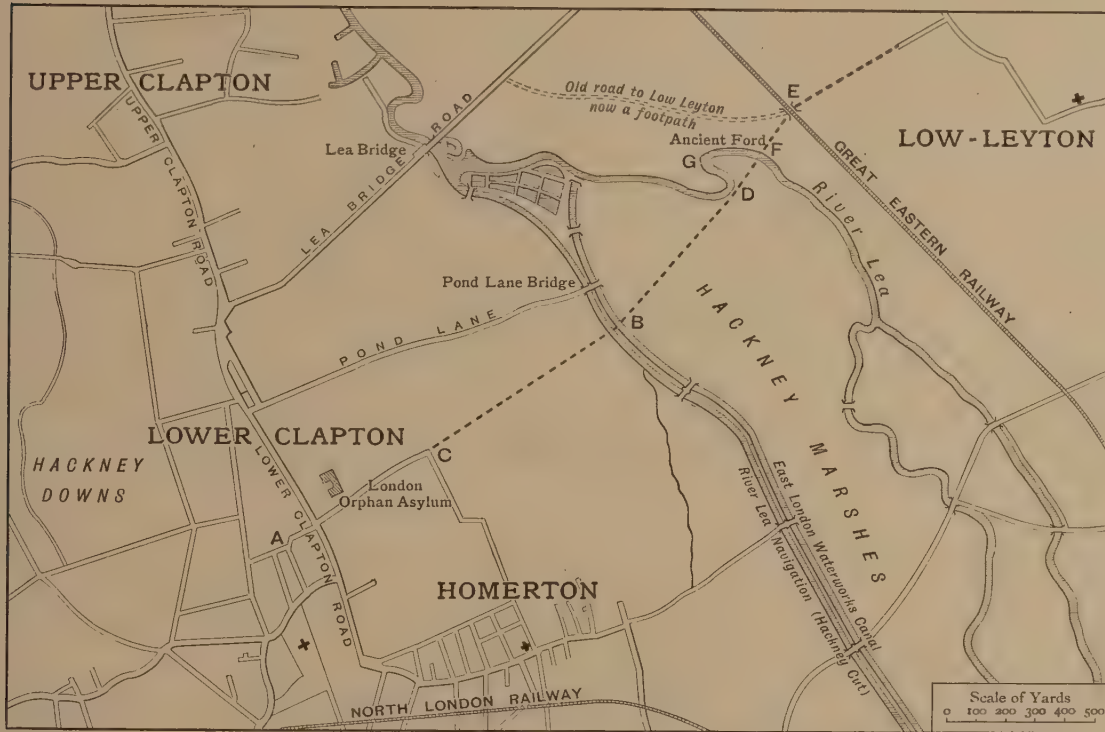
In describing a marble sarcophagus found at Lower Clapton in 1867, Mr. Benjamin Clarke contributed to the London and Middlesex Archaeological Society's *Transactions* (vol. iii, 191) some illuminating remarks on a supposed Roman road in that neighbourhood. His sketch-plan, here reproduced by permission (fig. 9), gives added weight to his contention that there was a Roman ford over the Lea in the line of the road adjoining which the sarco-

¹ *Archaeologia*, xxiii, 118.

² *Proceedings*, xxiii, 231.

phagus was found. From a point just south of Pond Lane bridge over the two canals—

the causeway passes on due north-east for half a mile in a straight line, until it reaches the banks of the river Lea at a point which a hundred years ago was the Lea Bridge Mill-head. On the opposite bank Mr. Maine, the resident engineer of the East London Waterworks, informs me that at 6 ft. below the present surface they have discovered a hard well-made road composed chiefly of gravel resembling



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Fig. 9. Plan of Clapton, with course of Roman road suggested by Benjamin Clarke in 1867. A, Clapton Alley. B, Canal crossed 184 yards S. of Pond Lane Bridge. C, Site of sarcophagus. D and G, Bends in old course of Lea. E, Railway-bridge. F, Ancient ford.

(Epping) forest gravel, and that this road still tended towards the north-east, perhaps to the Old Copper-mills, formerly the Walthamstow Mill. . . . Leland would seem to indicate a Roman way in the direction of the coffin's site. . . . I have followed the course of the Farm-road (from Clapton Alley to the River Lea Navigation Cut) from west to east, taking up the line on the other side of the Navigation Cut and East London Waterworks Aqueduct, about 184 yards south of the Pond Lane bridge. . . . The bridge over the Great Eastern railway carrying the Old Marsh road to Low Leyton appeared to be in a straight line. This line, about 850 yards in

length, brought me to the bank of the old river, and at a remarkable spot known for years as the 'boys' bathing-place', where the bottom consists of a hard smooth material and greyish sand, quite unlike the general bed of the river, which except at fords is of mud and clay. At this point the river is 64 ft. wide, and only from 3 ft. to 4 ft. 6 in. deep. On the opposite bank, 150 yards in an easterly course, is the bridge carrying the old Marsh Road, this portion of it being in a direct line from Clapton Alley.

Since 1868 the neighbourhood has undergone considerable alteration, but the ancient landmarks remain. The sarcophagus lay east and west (the Christian orientation) on the gravel about $2\frac{1}{2}$ ft. from the surface at the point C, now a few yards west of All Saints' church at the angle of Elderfield Road and Rushmore Road. Pond Lane on the plan corresponds to the present Millfields Road, and the road shown south of (the former site of) the London Orphan Asylum is now part of Powerscroft Road. Part of Brooksby's Walk (from the site C to Homerton church) is still called by that name; and beyond the Lea, Marsh Lane is still on the map.

Roman coins are recorded from the neighbourhood of the interment, but a discovery $1\frac{1}{2}$ miles south-west is of more serious import. In 1849 Mr. Southcott, of Dalston, exhibited to the British Archaeological Association¹ 'some Romano-British urns dug up near the canal at the junction of Sir William Middleton's estate and Rhodes's at the bottom of Shrubland Road in the Queen's Road, Dalston'; and J. E. Price² accepted them as cinerary vessels, and therefore proof of burials at that spot. Such finds in North London are rare, and it is all the more significant that the site is on the line of Mr. Clarke's road to the Lea ford. If this line is produced towards the City it will be found to cross Old Street a quarter of a mile east of Goswell Road, and make straight for Holborn Bridge, which carried two other routes over the Fleet.

Reasons good or bad have now been given for the situation of all the known Saxon churches in London, except St. Alphage, London Wall, which was originally on the north side of the street called London Wall (where the graveyard still remains),³ in close contact with the Wall itself, and a little east of Cripplegate. It was perhaps by this gate⁴ that the body of St. Edmund was brought

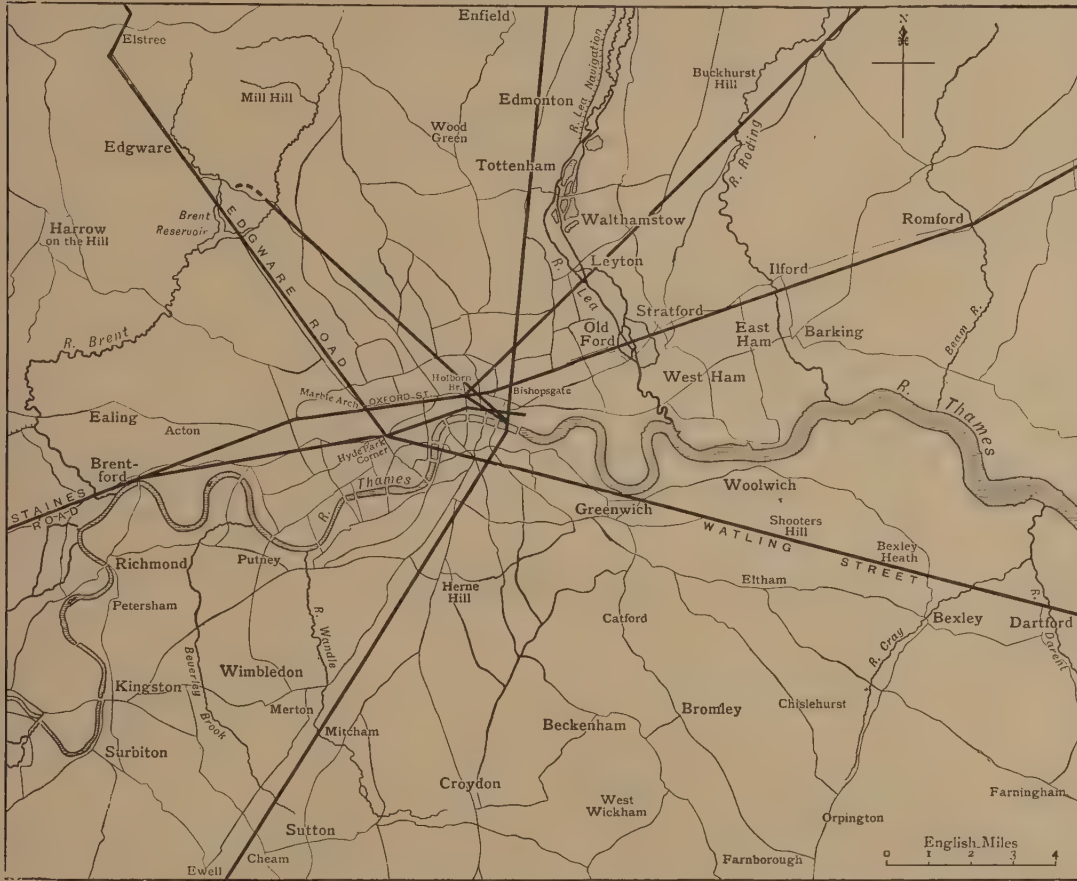
¹ *Journal*, iv, 79. The property of William Rhodes extended to the southern border of St. John's parish, Hackney (see map of parish, dated 1834, in British Museum).

² *London and Middlesex Arch. Soc. Trans.*, iii, 197.

³ Mr. Philip Norman in *Architectural Review*, March 1917, 130; and *Archaeologia*, lx, 169. Our Fellow Mr. Clapham, in a note kindly communicated by Mr. Norman, states that near the west end of the enclosure there are traces, on the mediæval superstructure of the wall, of the return of the chancel wall, marking the east end of the original church.

⁴ A minor point of some interest is the identity of Ealsegate, which Stow (*Kingsford*, i, 33 and ii, 274-5) took to be Cripplegate, but which Mr. W. H. Stevenson regards as Aldgate (*English*

into the city in 1010 on its way to St. Paul's from Bury St. Edmund's; and the body rested for three years in the church of St. Gregory by St. Paul's. The map still retains traces of the old Suffolk Way south of Great Dunmow and north



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Fig. 10. Environs of London, with suggested system of Roman roads.
Based on the O. S. Map, with the sanction of the Controller of H.M. Stationery Office.

Historical Review, xii, 491). The original source, dating about 1095, is *Memorials of St. Edmund's Abbey* (Rolls Series, edited by Thos. Arnold), and the editorial note on vol. i, p. 43 is delightfully ambiguous: 'Coming to London from Essex Egelwin would naturally enter the City by the eastern gate Aldgate.' Did the case in question come under the rule, or was it an exception? Another account of Egelwin's journey with St. Edmund's body (*Memorials*, i, 121) mentions a miraculous crossing of the Lea by means of a broken bridge at Stratford. In that case Aldgate would have been the obvious gate of entry, and another legend gives Algate (Horstman, *Nova Legenda Anglie*, ii, 598), yet Stow and Lydgate say Cripplegate. Lives of the saints are not scientific history, and contradictions may be expected; but on the theory of a Roman road all the way from Bury to London, Cripplegate would have been on the direct line. On the return journey a halt was made at Greenstead, the famous wooden church standing close to the line in question.

of Finchingfield, pointing through Clare to Bury. The four-mile stretch south of Dunmow, if continued, would strike the line from Holborn through Lower Clapton about Shelley at a very small angle, the latter line coalescing with a two-mile stretch near the Roding between Abridge and Chigwell. The river might be thought to have rendered a straight line impracticable, but if the evidence is not at fault the deviation was very slight. By the kindness of Mr. Page I have extracted the following finds from the Roman material collected for the *Victoria History of Essex*, and more evidence may come to light, though no one seems to have recognized the line, or suspected a Roman road in this direction (fig. 10):¹

LOW LEYTON. Mr. Letheuillier gave an account of some Roman antiquities found here (*Soc. Antiq. Minutes*, i (1725), 163).

CHIGWELL. Rim of a Romano-British vase (possibly a cinerary urn : *Journ. Brit. Arch. Assoc.*, N. S., v, 93).

BETWEEN CHIGWELL AND ABRIDGE. In 1790 Mr. Houlston exhibited to this Society a Roman brooch and coin of Marcus Aurelius recently dug up in a gravel-pit. Near the spot had been found pieces of Roman earthenware, particularly urns containing the ashes of the dead, several paterae, and many lachrymatories and earthen bottles capable of holding a pint : also a tessellated pavement. They were in the possession of Dr. Wilkinson, F.R.S. (*Soc. Antiq. Minutes*, xxiii, 270).

THEYDON MOUNT. A find on the estate of Sir Wm. Bowyer Smijth, Bt., $\frac{1}{4}$ mile from the Roding, was reported to this Society in 1863, and included a bronze jug of fine design, a cylindrical lead cist, a Samian cup, thumb-pot, globular bottle, and black saucers (*Proceedings*, 2nd ser., ii, 184-6).

THEYDON MOUNT AND STAPLEFORD TAWNEY (between the churches of). Three miles from Epping Town fragments of ordinary Roman pottery were found at a depth of six feet (*Proceedings*, 2nd ser., iv, 446).

FITZJOHNS. Close to the Roman road from Colchester (*sic*) and 4 miles from Dunmow were found two brooches, a hairpin, and ornamented fragments of bronze (*Arch. Journ.*, xxvii, 213). Fitzjohns is a good mile from the road south-west of Great Dunmow, opposite High Roding.

DUNMOW. Coins found on various occasions (*Archaeologia*, v, 139), and other finds mentioned in *Essex Arch. Soc. Trans.*, v (1873), 217.

TOPPESFIELD (one mile south-west of). On Bradfield's Farm there appears to have been a Saxon cremated burial with sword above a richly furnished Roman interment of the first century, found in 1800 and described in *Archaeologia*, xiv, 24.

RIDGEWELL. Roman villa described in *Archaeologia*, xiv, 62.

¹ Other Essex roads are discussed by J. E. Price in *Archaeological Review*, ii, 101 ; *Journ. Brit. Arch. Assoc.*, iii, 318 ; *Arch. Journ.*, xxxv, 80 ; *V. C. H. Suffolk*, i, 208, and *Archaeologia*, xiv, 70. For Stane Street, the Roman road running west from Colchester through Mark's Tey, Coggeshall, Braintree, Great Dunmow, and Bishop's Stortford, see T. Codrington, *Roman Roads in Britain*, 216.

Meaning and reality are thus given to the hypothetical line north of London ; and, in spite of the wanderings recorded in the legend, it is easy to imagine the closing stages of the procession from Bury. Though Moorfields extended east and west of Cripplegate¹ outside the Wall in Saxon times, there was clearly a causeway to give access to the postern, and the monks might have turned off the Roman road before reaching Smithfield, and struck south along a road now represented by White Cross Street. This leaves Old Street at the point where the Roman road reached it ; and reasons have been given elsewhere for supposing that Old Street, which runs along the first high ground north of Moorfields, supplanted that portion of the Holborn–Old Ford road which was destroyed by the flooding of Moorfields. A more direct route from Bury to St. Paul's it would be difficult to imagine ; and it may be assumed that the Roman metalling was still in good order.

The position of old St. Alphage can therefore be explained, completing the list of known Saxon churches in London. It stood in the same relation to Cripplegate as St. Martin's to Ludgate, or perhaps All Hallows, Barking, to the Tower postern. South of the river, St. Olave's, Tooley Street, close to the point where the Ermine Street reaches the river, may be further evidence of a close connexion between the Roman roads and Saxon churches of the metropolis. Thus traffic approaching London from the west along Oxford Street would split up into three streams at Holborn Bridge—two crossing the Lea into Essex, and the third crossing the Thames into Kent. Similarly at the north end of the Thames crossing there was a choice of three roads—Watling Street to Newgate and Staines, or Edgware via Hampstead to St. Alban's, or along the Ermine Street due north.

This may seem an arbitrary method of reconstituting the Roman road system ; but the coincidences are so many that design becomes evident, and a study of the map of Ancient Rome should inspire confidence. Both capitals are on a navigable river, and throughout their history have been the meeting-place of the chief provincial roads ; hence, so far as the river and nature of the ground permitted, the roads within the city resemble the spokes of a wheel, and dominated the arrangement of the city buildings ; whereas in a little town like Silchester the main roads, on entering the walls, conformed to the rectangular *insulae* or blocks of houses. It is possible that London east of the Walbrook was laid out in rectangular blocks, but no encouragement is given by the finds in Lombard Street illustrated in *Vict. c. Hist. London*, i, 81, fig. 30.

In Roman London the burials might be thought too numerous to give any clue to the road system, but the majority are found to flank the main arteries

¹ *Stow's Survey* (Kingsford), i, 33. Moorgate was opened about 1415 to enable citizens to cross the marsh by means of causeways (*ibid.*, p. 32).

and to confirm the lines deducible from the gates, fords, and discovered patches of the metalling. Except just outside the walls, burials in Middlesex are extremely rare, yet the same method links up nearly all and accounts for their occurrence. In dealing with scattered evidence of this kind it should always be remembered that an isolated burial counts two on a division. Occurring where it does it confirms any suspicion of a Roman road past the spot; and as there are no neighbouring burials to distract attention or to suggest alternative routes, the connexion between road and burial becomes almost a certainty. It is a curious circumstance that the position of two outstanding Saxon churches should have given a clue to what was perhaps a British track before it became a Roman road; but the issue indicates that Roman roads now lost were visible three centuries ago, and that there was an intimate relation between them and the churches built or taken over by our Anglo-Saxon forefathers.

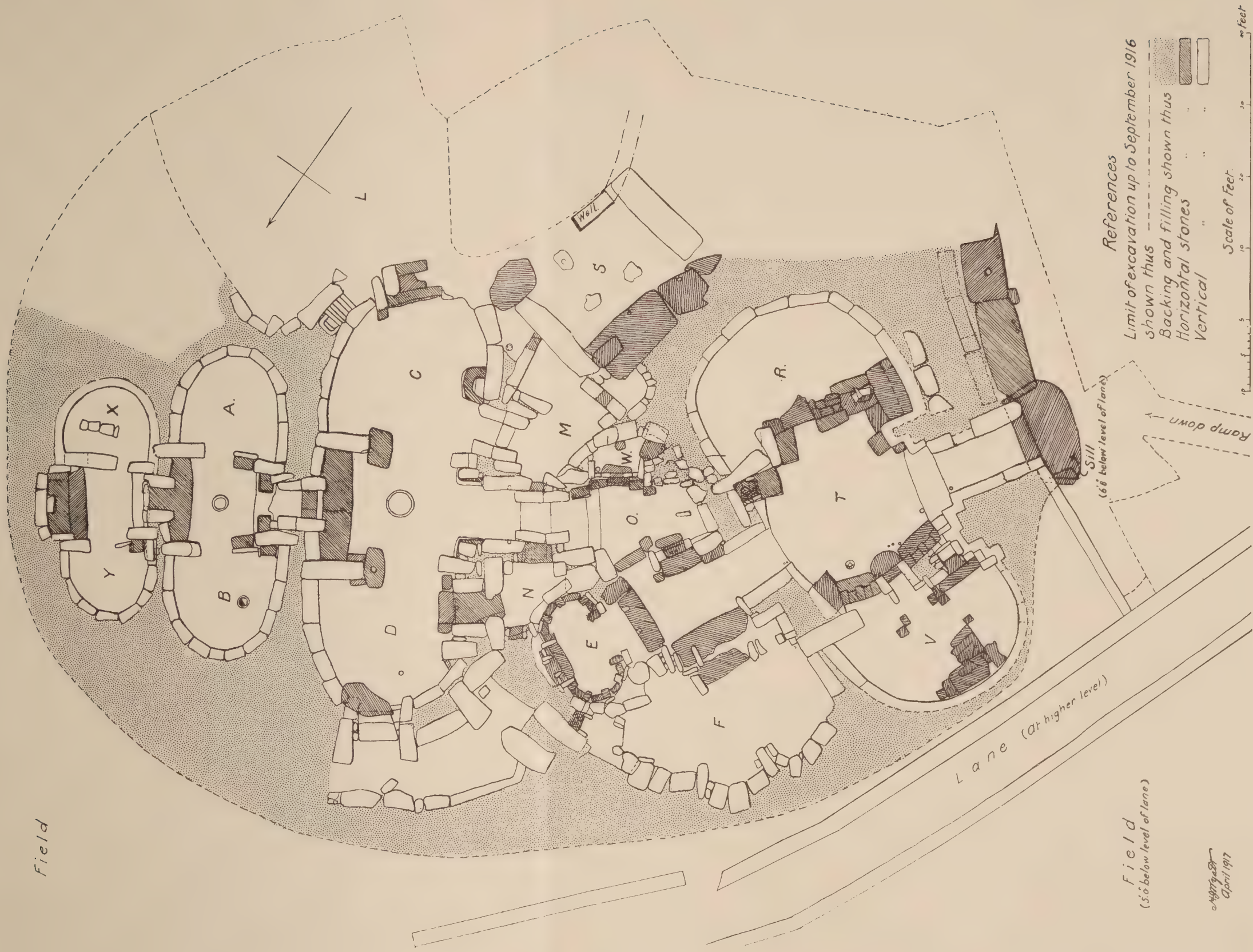


Fig. 1. Plan of the excavated portion of the Hal-Tarxien temple in September 1916

IX.—*Second Report on the Hal-Tarxien Excavations, Malta.* By Professor
T. ZAMMIT, C.M.G., Curator of the Valletta Museum.

Read 28th June 1917.

DURING the financial year 1916-17 the Tarxien remains were further cleared, the work continuing from the last week of April 1916 to the 12th September of that year (see Plan, fig. 1).

The approach to the main entrance was uncovered, and the limits of the ruins to the south and south-west clearly defined. A fine slab with a convex edge was found at the entrance, extending under the doorway, to serve the purpose of a doorstep. On each side of this doorstep large stone blocks support the outer wall, which probably formed a wide semicircle in front of a forecourt, as in the cases of Hagiar Kim, Mnajdra, Cordin, etc. To the west these blocks are wanting, but to the east two of them are still *in situ*. The first one close to the doorway is 13 ft. (4.5 m.) long, 4 ft. 10 in. (1.5 m.) wide, and 2 ft. 8 in. (81 cm.) high; the second is smaller, and a third is fragmentary. These blocks, which may have afforded sitting accommodation to the worshippers, served also to support a row of vertical slabs which formed the outer wall of the building. Unluckily this wall has disappeared, but the stump of one of the large slabs, 5 ft. (1.5 m.) wide and 2 ft. 1 in. (63 cm.) thick, is still visible behind the large footstone to the right of the entrance. Further information will probably be gathered when the soil in front of the entrance is completely removed, but enough has been found to show the importance of the wall.

The mound of soil to the west of the main entrance was cleared to the floor-level, and a wide apse was discovered of which the retaining wall had been completely destroyed. Large fragments of the standing slabs and blocks were however found *in situ*, and this enabled us to determine the boundary line and to construct a rubble wall upon it. This space with a floor of beaten earth and stones (known locally as *torba*) has an entrance on the main passage.

To the left of the main passage a fine smooth slab, 11 ft. 8 in. (3.70 m.) long, 4 ft. (1.22 m.) wide, and 7 in. (18 cm.) high, is laid so as to form a step. Four

vertical slabs standing on this step formed two lateral niches about 2 ft. 7 in. (78 cm.) wide, one on each side; and left in the middle part an entrance to the room F, of which the threshold, 7 ft. 4 in. (2.23 m.) long and 2 ft. 9 in. (83.8 cm.) wide, is still *in situ*. The orthostatic slabs on the left side were knocked down, but there was no difficulty in determining where they stood from the fragments *in situ* and from the marks on the other stones. The threshold has the customary pair of communicating rope-holes on the left. In the niche formed by the pair of standing slabs to the right, animal bones and especially goat horn-cores were found. Beyond the entrance, to the right, large slabs form the wall. Farther to the north-east a high step 3 ft. 10 in. (1.20 m.) long is laid at the end of the apse, on which a trilithon doorway was once raised in front of a small room carefully paved. Of this doorway only the right jamb can be seen, richly ornamented with deep round pittings of the best Mnaidra type (pl. XXXI, fig. 1). This small room or chapel F has an elaborate altar in front, formed of a finely pitted quadrangular slab placed horizontally, and supported by two slabs on end and by a central cylindrical bobbin-shaped pillar. The sides are flanked by two long slabs on end, carefully pitted, not by holes drilled with a borer but by tiny squares chipped with a straight flint chisel. A circular hole is cut through the thickness of the slab, on the left, filled up by a well-fitting cylindrical plug. When this niche was cleared, all the space under the table was full of animal bones and horn-cores of bulls, sheep, and goats. The sherds collected at this site were of the best neolithic period, the most remarkable being fragments of a thick clay vessel decorated with large bosses that filled the space between a series of well-defined heater-shaped shields (fig. 21).

The north-east limit of this pretty chapel is now badly defined, but probably it consisted of a huge block, of which only the base is *in situ*.

The northern end of the main entrance T was completely cleared during the year. Just in front of this and at right angles to it is a finely ornamented block about 2 ft. (60 cm.) high, 9 ft. 4 in. (2.4 m.) long, and 2 ft. 9 in. (83 cm.) thick. As the stone did not completely fill up the front of the entrance, a smaller block, 2 ft. 4 in. (71 cm.) long, was added to the right, on which the running design in front was continued. As already mentioned in last year's report,¹ this block was completely buried in a fine sandy soil carried down by natural agencies and deposited in the course of years. This layer of soil extended to about 1 ft. (30 cm.) above the surface of the stone, and upon this the Bronze Age layer with its cinerary urns was deposited at a time when all traces of the ornamented block and of the building at that level had completely disappeared under the soil. This block is ornamented with a design consisting of two rows

¹ *Archaeologia*, lxxvii, pl. xxii, fig. 2.

of running spirals, with bifurcated ends, cut in high relief (pl. XXXI, fig. 2). It forms the front of a semicircular room or chapel built at the end of the passage τ in front of the main entrance, so that the eye rested on it as soon as the building was entered. The upper surface of the stone block is bare, but it is evident, from marks left on it, that a superstructure existed, consisting probably of a central trilithon and side niches forming a fitting façade to the elaborate chapel. At the back of the room an inner façade is constructed over a smooth block, 9 in. (23 cm.) high, laid between two long slabs ornamented with a parabolic line towards the middle. On the horizontal block a doorway is built, consisting of two sets of jambs and lintels carefully arranged. Beyond this is a recess bounded by a curved rubble wall, in which sacrificial remains were stored, as evidenced by numerous fragments of bones and horn-cores found packed near the bottom. From this central façade, both to the right and to the left, a series of what appear to be low stone seats is constructed with well-smoothed and probably red-painted surfaces and raised edges. The floor is smooth and made of large rectangular blocks carefully laid on smaller stones. As two of the paving blocks were found smashed by the fall of a large stone, it was possible to examine them down to the level of the floor of the main entrance τ . The space between the stone blocks at the bottom was filled with small chipped stones and red soil mixed with neolithic sherds, among which the most remarkable was a fine red bowl with conical cover, shown in fig. 17.

The walls of this chapel are made of small stones showing distinct corbelling. This room was undoubtedly constructed at a later period of the Stone Age, when the old sanctuary was enlarged by the addition of rooms to the south of the original entrance. An excellent proof of this is afforded by the eastern wall, which encroaches on the space of a room ν of the old temple. This room is now reduced to one-half its original size by the wall that passes through its middle part.

The main passage τ , blocked in front by the ornamented slab of the chapel ϵ , leads to the right into a square space $\omicron$ in front of what I consider to have been in early days the main entrance of the older sanctuary. This quadrangular space came into existence when the niche q was constructed, and its back wall formed the southern limit of the space. The enclosure, marked with the letter p on the plan published last year, has now disappeared, as the long slab across the space was found to have been there by accident, having been pushed down, probably in the Bronze Age, from its vertical position on the western wall.

This space is at a somewhat higher level than the main passage τ , the doorstep overlooking the passage being 9 in. (22.5 cm.) high. The space $\omicron$ has

a floor of beaten earth (*torba*) in which a long slab 5 ft. 5 in. (1.67 m.) high, of a quadrangular section, with a slight but distinct curvature, is deeply fixed (pl. XXXIV, fig. 1). This pillar, which leans slightly to the north-east, is carefully trimmed and pitted on two of its sides. The other sides are rough as if originally meant to stand against another stone. A similar slab is fixed on the eastern wall in the same space, and we may assume that the standing stone was erected on the western wall to match the other still in its original position. So much trouble was taken to fix the pillar in the position it now occupies that it appears to be intended to mark the middle line of the long passage dividing the old building into two symmetrical halves.

This space o is therefore bounded to the north by the doorway leading to the older sanctuary, and to the south by a small apse at the back of the niche q. To the west there is the entrance over a carefully worked block flanked by two smaller stones; and farther south a large vertical stone slab with a window-like opening similar to the characteristic entrances of several rooms at Hagiar Kim and Mnaidra. The broken upper portion of this slab was found wedged in the window-space. In the sill of this entrance two deep rope-holes are cut, connected by a U-shaped channel.

The eastern wall is made of another slab on end, cut out to form the frame of a doorway (pl. XXXII, fig. 1). The lintel of the doorway is broken, but still *in situ*. In front and at the back, on both jambs, double communicating holes are drilled, two sets being cut on the inner surface. This entrance leads to a narrow oblong space w with concave walls, which show distinctly that the space was covered over. At the back, opposite the entrance, a slab on end appears to have been used as a small altar (pl. XXXII, fig. 2). This closet was a depository of bones, the remains of sacrificial animals. Fragments of bones and early neolithic pottery occupied the space for over 30 cm., the upper portion being filled with earth mixed with ashes and other remnants of the Bronze Age. At the southern end of this space three recesses were carefully built to contain more bones (pl. XXXII, fig. 3). In a line with the floor a cavity about 3 ft. (1 m.) deep and 2 ft. 8 in. (63 cm.) wide is cut in the thickness of the wall at the entrance, and is roofed over by a stone slab at a height of about 1 ft. 9 in. (53 cm.). Above this slab another recess, 1 ft. 9 in. (53 cm.) high, is constructed, and in the space between the eastern and western wall a thick slab, supported on flat pillars at each end, forms the floor of another closet. A great number of horn-cores were found closely packed in these recesses, together with fragments of stone implements, such as mortars, cones, etc., and three triangular stone slabs with rounded edges, about 1 ft. (30 cm.) long and 6 in. (15 cm.) high, one having a deep depression on each side as if intended to be grasped at that level. These stones were probably crushers or rubbers of some kind.

This room w appears also to be a later addition to the old temple, for the eastern wall blocks up part of the room m just as the chapel e was built at the expense of the room n.

The space o was therefore turned into a kind of anteroom, where sitting accommodation was provided in the shape of smooth stone benches round the walls, with slightly convex faces ornamented with frames cut all round the margins of the stones.

The space o leads northward to the entrance of the older temple, which, in all respects, resembles the well-known sanctuaries of Gigantia, Hagiar Kim, Mnajdra, and Cordin. Considered from this point the northern and the southern parts of the building appear to be of different types, constructed at different stages of art. The northern portion is massive, rude, severe, simpler in its elements, and more compact and imposing. The ornaments are fewer and more sober, but executed with a firmer hand, and more effective. The slabs and blocks are heavier, and placed with greater freedom and accuracy. The apses are wider and better designed.

In the later portion, to the south, there is no parsimony either of space or ornament; the apses, however, are seldom accurately designed, and the blocks are not finished with care, nor have they an appearance of great solidity. The ornaments are more elaborate, more flamboyant and varied, but they lack the firm lines of the old type. A peculiar feature of the old spirals cut on stone is that they always have a flat surface, while those of later date have a convex surface. The effect of the former is in many places enhanced by a background of pitting, as in the case of the two partition walls seen in the inner rooms.

The entrance to the first set of apses d and c is very imposing, and consists of broad vertical slabs standing on a large flagstone which serves also as a threshold. The vertical slabs are of the same height, and appear to have been roofed over by other slabs placed horizontally. Several long slabs which may have belonged to the passage were found in the vicinity, some of them in fragments but a few quite whole. The passage is 17 ft. 6 in. (7m.) long, and on each side, at its inner end, a monolith stands on a large plinth raised to the desired height by a layer of smaller stones.

Beyond this passage, and at right angles to it, is the long oval area cd, 46 ft. (14 m.) long, carefully paved with large and well-fitted flagstones.

In the middle space, opposite the entrance, is a round stone basin about 1 ft. 2 in. (35 cm.) high and 3 ft. 8 in. (1.10 m.) in diameter. It has a thickness of 4½ in. (11.5 cm.) at the rim, which is broken, and there are signs of burning all round. It contained a hard whitish clay and some grey ash (burnt limestone) at the surface. That a fire was kept burning for a long time in this basin is

clear from the condition of the basin itself and of the pavement east and west of it. Logs of wood were probably not always confined to the central hearth. In the basin we found a few sherds of neolithic pottery, fragments of animal bones, tiny bits of charcoal, and a flint flake.

The northern wall of the two apses c and d, which curves gracefully to the north-west and to the south-east, is made of large slabs on end, with courses of ashlar masonry on top of them. To the north-west the apse d had an entrance which was designedly blocked up by a large slab let down from above between the jambs of the doorway made of two enormous slabs. What in the early part of the excavations was considered as part of a roof is clearly the lintel of this doorway. As was to be expected, a pair of converging holes are cut in the pavement to the south of the entrance, and similar V-shaped holes are seen on each jamb of the doorway at about 4 ft. (1.20 m.) from the floor. The right jamb shows traces of another pair of holes about 1 ft. (30 cm.) from the floor.

The south-eastern apse c also has a gateway at its farthest end, but of this only the left jamb and three steps remain *in situ*. Two small connecting holes are cut on the left of the first step, which is carefully embedded in mortar, and this is smoothed down to make a continuous line to the flagstone of the apse. To the right the wall of the apse had disappeared, but enough was left of its base to show where it stood (pl. XXXIII, fig. 1). Both apses are perfectly symmetrical, and judging from the inward inclination of the slabs and the distinct corbelling of the ashlar masonry, it is probable that they were covered with a domed roof.

To the right and left of the main entrance from the south are two symmetrical doorways constructed of huge slabs. That to the west has a long horizontal slab in front of it, while another large slab, with a pair of V-shaped holes in the middle, fills the whole passage. This entrance leads to a small room n, across which the wall of the chapel e was constructed. The inner doorway consisted originally of a large slab on end in which a window-like opening was hewn, as in several entrances at Hagiar Kim and Mnaidra. At present the lintel of this doorway is mostly wanting, but enough remains to show its original form. The small room n is barely 7 ft. (2.15 m.) wide, completely out of proportion to the imposing entrance. Its floor is made of beaten earth. A double niche, constructed with vertical and horizontal slabs, is raised on the eastern side of this room, and another niche is built in the thickness of the western wall. Both were intended for the storage of bones and horn-cores, of which a great quantity was found. The walls of this room, formed mainly of large standing blocks, are disintegrated and reddened by fierce fires, probably in the Bronze Age. The Malta limestone reddens, cracks, and burns

to lime when heated, and the detached pieces of stone would be washed down by rain.

The other room to the east *m* opens to the space *c*, and has an imposing entrance, level with the main floor. This room *m* is also reduced in size by the wall of the closet *w*, obviously constructed at a later date. The back wall to the south is formed of two large blocks of stone. In the stone block on the right is cut a square hole, 1 ft. 10 in. (55 cm.) high and 2 ft. (60 cm.) deep, leading to a small space which was a depository of animal bones. This space was completely covered, though only half the dome is now to be seen. A similar recess, now badly damaged, existed in the eastern angle of the room with a square passage cut in a large block. The room has a *torba* floor, and the walls are as badly burned as those of the room on the other side *n*. The Bronze Age layer containing potsherds, incinerated human bones, and other material connected with the cremation of bodies, was found to continue down to about 1 ft. (30 cm.) from the floor, but not farther.

The main features of this room are the figures of two bulls and a sow cut in relief on the two blocks of stone forming the southern wall.¹ On the left are a bull in profile to the right, and a sow, easily distinguished by thirteen pairs of teats, and on the right another bull facing to the left. The figures are slightly damaged, that on the left by the action of fire and that on the right by a break at the level of the animal's back. To the right of the entrance of this room, nearly at the level of the floor, and certainly under the Bronze Age level, two large bulls' horn-cores were discovered carefully laid close together (pl. XXXIII, fig. 4). The horns are 2 ft. 4 in. (70 cm.) long, and have a circumference of 1 ft. (30 cm.) at their base. They do not form a pair, for they are both of the left side. Long burial in a damp soil had rendered them very brittle, but eventually they were carried safely to the museum.

The oval space *cd* is connected with a similar but smaller space *ab* parallel to it by a passage in a line with the main southern entrance to *cd* (pl. XXXIV, figs. 1, 2, and pl. XXXVI, fig. 3). In front of the passage a slightly convex block of stone, 15 ft. 7 in. (4.7 m.) long and 1 ft. (30 cm.) high, is flanked by two large slabs on end, with a quadrangular plinth in front of each. On the magnificent step, which is highly finished, and even polished in the middle part, four stone slabs fixed at right angles to each other form a doorway 4 ft. 11 in. (1.5 m.) wide at the entrance. On the western end of this step fragments of a large stone vessel broken *in situ* were found. The vessel when reconstructed was set up in the apse *d* (pl. XXXIII, figs. 2, 3). Curiously enough, this entrance is completely blocked up by a slab 2 ft. (63 cm.) high, evidently intended to keep out the *profanum vulgus*

¹ Illustrated in *Archaeologia*, lxvii, pl. xxiii, fig. 2.

from the holy precincts destined for the priests or those initiated into the mysterious rites of the temple. When the excavation of this site was complete, it was discovered that behind the apse c a flight of steps leads to a level above the walls of the apses and to a special passage made of beaten earth and lime that seems to lead into the innermost part of the temple. This was probably the private entrance to the holy part of the sanctuary reserved for the priests. The slab that bars the entrance is decorated with two spirals similar to the volutes of a Corinthian capital (pl. XXXIV, fig. 3). The spirals have flat surfaces; they start from above close to the middle line, and at the first turn branch off towards the external angle.

Beyond the ornamented slab is a passage 7 ft. (2.13 m.) long, 4 ft. (1.21 m.) wide, between two pairs of slabs on end 6 ft. 8 in. (2.03 m.) high. The two inner slabs, opposite each other, have two vertically-connected holes about 1 ft. 3 in. (38 cm.) deep at 3 ft. 2 in. (96 cm.) from the floor. The two pairs of holes have an outside diameter of about 4 in. (10 cm.), and are at a distance of 9 in. (23 cm.) from each other.

Behind the slabs of the passage two uprights are fixed, and behind these two other slabs on end which lengthen the passage by 3 ft. 3 in. (99.6 cm.) and widen it to about 8 ft. 6 in. (2.59 m.). Of the two uprights the one to the west shows a pair of conical holes, about 4 in. (10 cm.) in diameter and $7\frac{1}{2}$ in. (19 cm.) apart, going right through the slab at about 9 in. (22 cm.) from the ground. The upright on the opposite side has two holes corresponding to the pair opposite, and another single shallow one, 3 in. (76 mm.) deep, at a height of 3 ft. 3 in. (1 m.) from the floor. At the height of 5 ft. 6 in. (1.67 m.) two holes are found similar in every respect to the lower pair. Two well-squared cubical blocks are fixed at the end of the passage, which is thereby reduced to a width of 4 ft. 5 in. (1.35 m.).

The last uprights mark the starting-point of two lateral apses (A and B), each made of nine slabs on end, 6 ft. 1 in. (1.88 m.) high. Each of these apses is bounded at the back by the slabs, and in front by the uprights flanking the doorways that jut out to the south and to the north. Adjoining the entrances to the south, two vertical slabs, 5 ft. 2 in. (1.57 m.) high, are set before a low block with raised margins towards the passage.

The slabs are ornamented with four spirals springing from the angles, with a disc in the centre and a cone inserted between each pair of spirals (pl. XXXIV, fig. 4). The raised ornament has a flat polished surface, the background being roughened by means of round pits which give a most pleasing effect. The ornament is identical on both slabs, but, either intentionally or by mere accident, the slabs are set up in different positions so that the spirals appear to be different. These slabs were discovered *in situ*, but broken into minute fragments, probably by the action of a fierce fire which reddened the slabs at the same time as it

cracked them. All the fragments were pieced together with cement, and the original form of the slabs was thus recovered. Behind the southern pillar of the apse A are traces of a double-bottomed niche which was completely destroyed, and behind the pillar of the apse B, on the opposite side, a similar niche is still *in situ*. It consisted of two slabs on end topped by a coping slab with another slab fixed horizontally between the uprights and dividing the space in two equal parts. The niche, like every other similar structure in the temple, was used as a deposit for bones and horn-cores.

Midway between the niche and the wall of the apse a cylindrical stone basin is fixed to the floor. The outer surface is ornamented with large, deep, and carefully drilled pittings in the stone. A similar basin is fixed before one of the altars of the passage T near the main entrance. Behind this basin was found a magnificent clay vessel, 3 ft. 3 in. (1 m.) wide, now in the Valletta Museum.

Both vessels were probably intended to hold water, which, judging from the number of vessels met with, must have been a necessary element in the ritual services of this ancient sanctuary. This apse was an important one as far as one can judge by the important objects met with near the floor-surface, including sherds of most elaborate pots and fragments of several clay statuettes.

Opposite the entrance to the oval space AB is another shallow round hearth, 9 ft. (2.28 m.) high and about 2 ft. (61 cm.) in diameter, full of burnt lime and ashes. The rim of the basin is burnt, and the floor all round is discoloured by the embers (pl. XXXV, fig. 1). In front of the basin another doorway is constructed upon a very fine long block flanked by two enormous uprights which bound the two apses A and B on their northern side (pl. XXXVI, fig. 1). The upright to the west is broken, and a good portion of it is wanting, but that to the east is complete, though cracked at various points. It has rounded edges and smooth faces, and a pair of holes connected horizontally are cut on its eastern surface. Towards the base, at a distance of 1 ft. (30 cm.) from the floor, the front surface is decorated in a very original way by the insertion of five polished stones set in two lines, three stones in a row and one at each end in a lower line (pl. XXXVI, fig. 2). The set stones were fossil shells and dark round pebbles fixed deeply in holes cut for the purpose. Two of the stones were wanting; one was broken and removed by unknown persons, and two which were loose were removed and preserved in the Museum. This decoration, which was never before observed in these islands, denotes more than any other the refined taste of the neolithic artist who tooled the huge blocks with delicate care, as if they were personal ornaments, and thought them worthy of being polished and even jewelled.

As in the case of the oval space CD, the entrance to the north of AB is

over a slightly curved step and through a trilithon. In the principal Maltese megalithic sanctuaries the main architectural features are the two parallel oval spaces connected by means of a central passage. The end of this passage is usually a dolmen or small apse. We expected to find something of the sort when the site beyond the oval AB was cleared, but to our astonishment a third oval space was discovered. Beyond the trilithon of the doorway a rectangular space 3 m. long by 2.5 m. wide was cleared, ending in a low step, in the middle of which a triangular slab stands with base upwards, and is visible from the main entrance in the space O. Slabs on end on each side of this space form a passage to the side apses X and Y. The western apse is semicircular, and formed by nine slabs carefully jointed together. This room has a floor of beaten earth, and in the south-eastern corner a well-constructed niche of three smooth slabs had a horizontal partition in the middle (pl. XXXVI, fig. 3). A white mortar was used for the joints, and to fill up gaps and cracks in the stones not only of the niche but also of the slabs all round the room. Evidently when that building was new the walls were carefully plastered so as to give a smooth surface, and may also have been painted. Traces of red ochre were, in fact, found at various points in the building, especially on some of the stone vessels.

The niche contained the usual hoard of animal bones, and bone shafts were found deeply fixed into the *torba* floor under the niche, so firmly that they could not be removed.

On the opposite side of the oval space a similar arrangement existed, but the stones were so much pulled about that the primitive building was hardly recognizable. The nine slabs that formed the apse had been removed, but good proof of their existence was the impression left in the hard soil that backed them for ages. The indentation caused by the slabs was so clear that it was easy to construct a rubble wall where the slabs had been, and when this was ready it was found that the arc of the apse was of the same size as that to the west. Not only had the walls been destroyed, but the floor had been dug out and a double wall of roughly-squared stones constructed across the room. All this rearrangement took place, probably, in the Roman period, for sherds of Roman pottery, such as amphorae, plates, caccabi, etc., were dug out to the exclusion of pottery of other periods.

So far were the extensive ruins cleared up to the middle of September 1916. It is not probable that the building extended farther to the north, west, and south-west, but great possibilities exist to the north-east and east. To the south the forecourt is still encumbered with ruins. To the north-east numerous uprights appear through the soil of an adjoining field, and several oval spaces will probably be cleared in the next season.

Carvings on stone. The number of carved blocks and slabs is now very

considerable. One cannot fail to note the great difference between the carvings in what we consider to be the earliest part of the building and in that of the later period. The carvings to the north of the room o are much simpler in treatment, bolder in style, and wrought with greater freedom (pl. XXXIV, figs. 3, 4). The spirals are not complicated, and their surface is always flat, the effect of the design being enhanced by pitting, usually of the round type. In the later part of the building the motives are more pretentious, the more complicated spirals are often branched, and their surface is always convex. In the space τ all the blocks bear different ornaments; there is no sign of stencilling, every spiral being designed in a freehand manner to follow a general pattern, but without being tied to an absolute line (pl. XXXVII, figs. 1, 2, 3).

There is likewise a great difference in the treatment of the animals carved. The bulls in room μ are more freely cut than the row of goats in room v.¹

Neolithic objects—Grinders. More lava and hard stone grinders were met with, showing that wheat or other grains were freely ground in the precincts of the temple. As lava is not a stone natural to the island, it is evident that the implements were imported, probably from Sicily. The shape of the grinders is that usually met with in neolithic stations all over Europe, almond-shaped, with one flat surface and a slightly curved outline. They are mostly found in pairs; the larger one with flat surface upwards served the purpose of a table, and the smaller was moved up and down by hand over the grain to be crushed.

Mortars. Stone mortars both of hard and soft Maltese stone were obtained at different points. One of them, 1 ft. (30 cm.) high, 10 in. (25 cm.) in diameter, and 7 in. (17 cm.) deep, was found firmly embedded in the middle of room μ, and contained a handful of yellow sulphur crystals and some yellow ochre. The layer of soil in which it was set contained Bronze Age objects, and it is possible that the mortar should be attributed to a later age than the neolithic. Besides the mortars, several pillars, cylindrical or biconical, were found which may have been mortars or incense-burners. One object of this kind, made of a fine-grained soft stone, is distinctly biconical, and has a deep concavity at each end, so that the object could be used standing on either end. A queerly-shaped object, nearly spherical, with a shallow cup-like depression surrounded by a thick rim, may well have served the purpose of a mortar.

Hammer-stones, and hard stone rubbers of various size, were found in abundance. Many are simply large pebbles from a beach. The rubbers are often of a triangular shape, with a long depression near the apex to accommodate the fingers; in two of them a hole is cut through the flat stone to serve as a handle.

¹ *Archaeologia*, lxvii, pls. xvi and xxiii.

A very peculiar object of soft limestone is difficult to classify and describe. It is triangular in shape, 13 in. (34 cm.) high, 1 ft. 7 in. (50 cm.) wide at its base, and 6 in. (15 cm.) thick. At the apex it has a slit forming two well-rounded lips, about 1 in. (2½ cm.) apart. A hole is cut lower down from side to side, and the slit opens into this hole (fig. 2).

Stone vessels. Several stone vessels were found in various states of preservation. Besides the cylindrical vessels fixed in the floor of rooms T and B, and the shallow basins used as hearths in the oval rooms AB and CD, numerous fragments of movable stone vessels were found.

In the space R the bottom of what appears to have been a huge trough can be seen, not far from the remains of an enormous clay basin richly ornamented on the outer surface. A bottomless cylindrical stone vessel was found in room C. It is 14 in. (35 cm.) high, about 21 in. (52.3 cm.) at its wider part, and 17 in. (43 cm.) across the mouth. Its surface is smooth, and it has a distinct rim, traces of ochre showing that the vessel was originally painted red. It was found full of a thin grey ash mixed with soil, a few animal bones, minute neolithic sherds, and a few flint flakes.

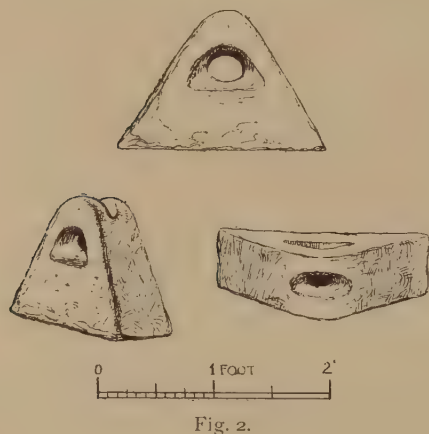


Fig. 2.

The best object of this series is a perfectly modelled stone vessel (pl. XXXIII, figs. 2, 3) resembling in shape the neolithic clay bowls, several of which were obtained from the ruins. It is 3 ft. (92 cm.) high, and has a diameter of 3 ft. 10 in. (1.16 m.) at its widest part. Its lines are very graceful, and the curve could not have been neater if it had been turned on a potter's wheel. Though hewn out of a large block of stone, its sides are not more than 3 in. (76 mm.) thick; it has a graceful rim, and at the line of the shoulder four symmetrical bosses to imitate the handles of a clay vessel. The vessel was found crushed in the north-west corner of the oval space CD, and about three-fourths of the fragments were recovered and put together. The lost portions were replaced by new stone, so that the vessel has been as far as possible restored to its original condition.

Stone statuettes. Beside the remains of the colossal stone statue standing at the south-east corner of the room T, fragments of smaller limestone figures were found. The colossal statue was probably about 10 ft. (3 m.) high, and what remains of it are the two legs and the lower part of a pleated skirt that reached to the knees. The legs are very fat and pear-shaped; the left is complete, but the foot broken; the right is broken, but the foot is broken only

at the toes. The skirt or kilt was pleated both in this statue and in some of the fragments of statuettes—quite a new feature in the Maltese figures, in which hitherto have been found undraped.

The fragments of smaller statuettes are :

(a) Base of fat seated figure on a low pedestal, the legs with very small feet tucked away to the left. It is $8\frac{1}{2}$ in. (21.5 cm.) high, $11\frac{1}{2}$ in. (29 cm.) wide, and $9\frac{1}{4}$ in. (23.6 cm.) deep (pl. XXXVIII).

(b) Headless statuette, of soft cretaceous limestone, of the usual extremely obese type. The thorax is very flat, but the thighs are fat and round. The small hands rest each on the corresponding thigh; the feet are broken off. It is 3 in. (7.5 cm.) high, 4 in. (10.2 cm.) wide across the buttocks, and $2\frac{1}{2}$ in. (6.2 cm.) deep. The figure is well finished and smoothed, and is quite Buddha-like in its reposeful attitude (pl. XXXVIII).

(c) Irregular fragment of a medium-sized statuette of Globigerina limestone. It represented a fat figure with skirt ornamented, probably, with embroidery. The right hand rests on the right knee. It measures $8\frac{1}{2}$ in. (21.4 cm.) in height (pl. XXXVIII).

(d) Another irregular fragment of a draped figure about 9 in. (23 cm.) high. The skirt, which appears to be long and pleated as in the other figures, seems to reach to the feet (pl. XXXVIII).

(e) Fragment of fat sitting statuette, naked to the waist, but with an elaborate skirt with same ornament as (c) and (d) (pl. XXXVIII) (width 22 cm.).

(f) Fragment of upper part of stone statuette, showing naked chest and right arm. Below the waist a skirt is worn, ornamented as in the other figures and covering a very prominent hip (pl. XXXVIII).

(g) Fragment of a fat statuette of the same material, of which the chest, right arm, and right hip only are recognizable. The figure differs essentially from all the other statuettes, and appears to have been worked in high relief, as part of the background is still attached to the figure (pl. XXXVIII).

(h) An irregular lump of limestone, on the top of which a translucent amber-colour stalactitic knob has grown. These formations are very common in Maltese caves and fissures, especially in the coralline limestone. The neolithic artist has utilized the globular stalactitic growth to carve a human head. The line of the face is deeply cut, the mouth is small, and a large fold as of fatty tissue surrounds the neck. The nose is flat, but probably broken (fig. 3, natural size).



Fig. 3.

(i) The lower part of a small fat figurine of baked clay, with a fine reddish shiny surface. The figure is broken at the waist, and the feet are wanting. It is represented as sitting with legs close together and very slightly tucked to the left. The buttocks are as usual very large with marked posterior flattening.

(j) A small rough clay model of a naked female figure. The legs are stumpy, and to represent the head the neck has merely been pinched. The right arm hangs down to the side, the left hand is raised to the head. It has prominent abdomen and pendulous breasts. Posteriorly a marked degree of emaciation is shown by undue prominence of the ribs and vertebrae. The figurine appears to be an *ex voto* of some pathological condition. Curiously enough it has small bits of white shells stuck into it before it was baked, in the region of the neck, the armpits, breasts, navel, groins, scapulae, vertebrae, etc. This figurine was found under the large block of stone to the right of the main entrance.

(k) An oval flattish bead of a yellowish white stone resembling alabaster, but having a striated appearance with grey and yellowish lines. In one of the broad surfaces a human face is cleverly carved. The eyes are long and horizontal, the nose thick and fairly prominent, the cheek-bones high, the mouth small with thick lips and a well-formed chin. The back is flat but somewhat convex. A hole pierces the head from end to end in a curved line parallel to the face, and shows that it was used as a pendant (fig. 4, natural size).



Fig. 4.

It is remarkable that the neolithic people in Malta made constant use of striated stones for working small objects, as shown by the numerous articles found at Halsaflieni. Such stones are not known in the Maltese islands, and must, therefore, have been imported.

(l) Unbaked clay statuettes. Close to the floor of the apse B, among débris of all kinds, fragments of several thin clay statuettes were discovered. One of these was nearly whole, but when an attempt was made to lift it into a box, it crumbled away owing to damp and imperfect firing. In the circumstances, the fragments were carefully collected and hardened by dipping in glue. In this manner large fragments of three statuettes were reconstructed. Not far from the place in which the statuettes were found, two clay heads were discovered which must have belonged to the statuettes themselves.

These statuettes were of unbaked clay, and hollow, with the internal portion showing distinctly the marks of the tool that stiffened the clay all round. They all represent standing figures draped from the waist downwards, the skirt in all cases reaching to the ground and hiding the feet. The skirt hangs straight from the hips, which are not abnormally fat; and several arms were found, also of

normal appearance. The skirts are ornamented with lines which appear to represent embroidery (pl. XXXIX, b, c). Towards the middle of the skirt a jagged line extends from the waist to the lower edge, which may show either the line along which the skirt was fastened or, better, a chain hanging from the waist. In two of the statuettes the neck shows a cavity to hold a movable head.

The two heads found in the vicinity may well have fitted the statuettes. One of them must have been thrown into a fire which burnt it in part but hardened it at the same time, thus preserving it in a good condition. The other head was smaller and fragmentary. The large head is hollow, and the neck is broken. The forehead is large, the nose well formed but not very prominent, the cheeks are full, the chin well marked. The eyes are set horizontally. It is an intelligent face, modelled with skill and well finished. The head is covered by a wig which closely resembles that worn by English judges, with flowing curls and ending at a bevelled edge on the nape.

The smaller head has likewise a wig, which is, however, different from the one just described. The hair is parted in the middle and, arranged in straight masses, ends sharply at the nape (pl. XXXIX, d).

Owing to their fragmentary nature these statuettes could not be completely reconstructed, but an attempt has been made to show the original composition of one of them in pl. XXXIX, a.

These figures were not those of the fat divinities of which so many fragments were obtained in Tarxien and in other neolithic stations, but rather of priests or other important functionaries, which recall the priests with folded arms in Assyrian bas-reliefs, and the Chaldean figures in the characteristic attitude of prayer.

NEOLITHIC POTTERY.¹

Although only a few entire pieces of neolithic pottery were found, the great variety of sherds collected are an ample compensation for this deficiency.

Of the vessels which were found whole or which we were able to reconstruct from the sherds, the following are the more remarkable:

1. A reddish-grey, bottle-shaped amphora, with patches of red and black due to different degrees of baking, was found at floor-level in space L. It is 28 cm. high, 25 cm. at its widest part, and 7 cm. at its mouth. It is ornamented by eleven parallel bands of small oval notches, about 5 mm. in length, originally filled up with a white paste. At the root of the neck two sets of rope-holes, cut

¹ Figs. 5-17 are reproduced at $\frac{1}{4}$ actual size.

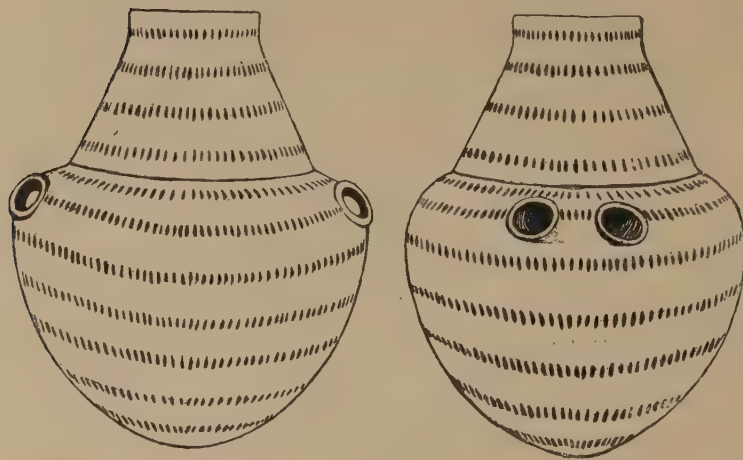


Fig. 5.

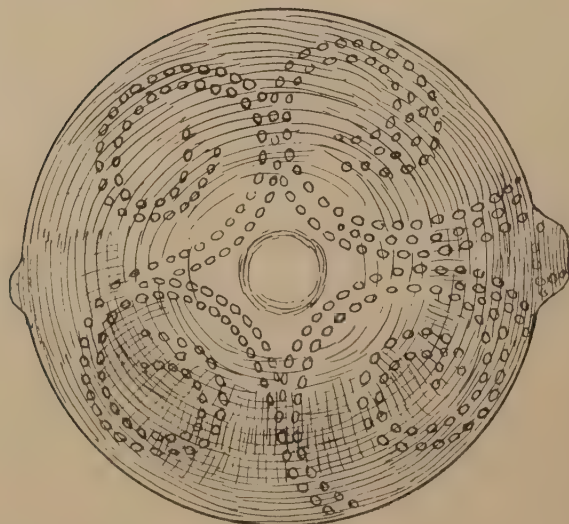
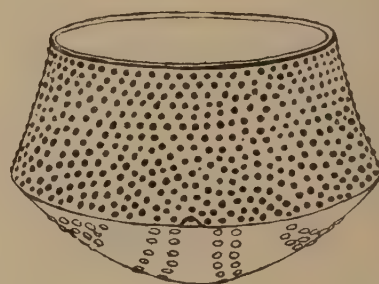


Fig. 6.

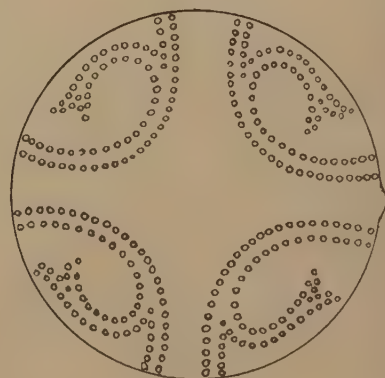


Fig. 7.

through the thickness of the wall, serve the purpose of handles. The base is conical, so that the vessel is unable to stand (fig. 5).

2. A series of exquisitely fine bowls make a set of a type quite new to Malta. The largest one, 23 cm. high, is 34 cm. at its widest part with a diameter of 28 cm. at its mouth. It has a small circular base on which it stands well. At the height of the shoulder it has a triangular handle and a dainty knob on the opposite side. It is highly burnished and of a dark grey colour, with lighter and darker patches due to irregular firing. The base and the sides are decorated with a series of flattened stripes resembling ribbons made of double rows of raised knobs (fig. 6).

3. A second bowl, 16 cm. high, 22 cm. at its larger diameter, and 16 cm. at the mouth, has the concave sides ornamented with fourteen rows of small raised knobs which stand out of a layer of white paste. The round convex base is decorated with four bands made of double rows of knobs, in the manner of the preceding vessel, the ribbon-like spirals being forked at the ends. These spirals recall to mind the paintings on the ceiling at Halsafieni and the carved decorations on stone at the entrance to the Tarxien temple (fig. 7).

4. A smaller bowl of the same type as the above, 85 mm. high, 135 mm. at its widest diameter, and 105 mm. at its mouth, has the convex bottom decorated with double rows of tiny knobs arranged in such a way as to form four arcs of a circle symmetrically disposed around the small circular base. The sides are covered with eight rows of studs emerging from a white background (fig. 8).

Fragments of similar vessels have been collected, but not in sufficient number to reconstruct them.

5. A set of three deep dishes of delicate manufacture, highly polished on the inside and decorated on the outside by rows of oval pits or raised knobs, were found close together.

One of these dishes, 21 cm. in diameter and 5.5 cm. in height, is of a drab colour with black and red patches due to irregular firing. It has a distinct rim, below which the side is decorated with twelve rows of oval knobs (fig. 9).

The second vessel, 175 mm. wide, has a concave bottom and the sides decorated with eight rows of oval pittings cut in the plastic clay with a hard tool which, pressed laterally before it was withdrawn, bulged the clay on one side. Looked at, therefore, from the front only the pitting is noticed, but a side view shows the raised oval ridges resulting from the pressure on the clay.

The third dish, 105 mm. at the top and 46 mm. in height, is of a light fawn colour decorated with five rows of oval dots. The convex bottom is ornamented with incised spirals with bifurcated ends (see fig. 10).

6. A highly burnished grey bowl, 62 mm. in height and 145 mm. at its widest diameter, with a fine triangular handle, has a convex bottom riddled with small

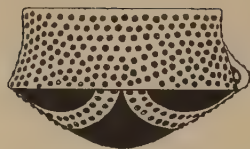


Fig. 8.



Fig. 9.



Fig. 10.



Fig. 11.



Fig. 12.

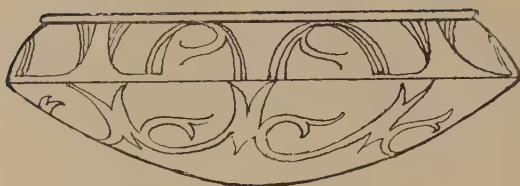


Fig. 13.



Fig. 14.



Fig. 15.



holes, of which there are thirteen rows of eight sets each. The vessel was evidently used as a strainer (fig. 11).

7. Two similar cylindrical-footed basins of a light fawn colour were found lying together on the floor of apse B. They are cleverly modelled, with a glossy surface as smooth as glass. One is 19 cm. in diameter and 10 cm. high, foot included. There are no incised ornaments, but the line of the shoulder is broken by four knobs symmetrically spaced (fig. 12).

8. The second vessel is 17.5 cm. in diameter, and has a cylindrical foot 9 cm. high.

9. The bowl shown in fig. 13 is of delicate workmanship. It is black and well polished, 10 cm. high, 31 cm. at its widest diameter, and 25.5 cm. at its mouth. The upper portion is ornamented with curved lines, and the base with a graceful twisting of spirals with free bifurcated ends.

10. A smaller dish of the same type, 18.5 cm. wide, is decorated with a simpler but very effective design (fig. 14).

11. Two perfectly modelled dark grey bowls were found lying together at floor-level. They have two small triangular handles and two knobs between. One is 132 mm. high, 215 mm. at its widest diameter, and 160 mm. at the mouth, with a circular base of 80 mm. (fig. 15).

12. The smaller one is 10 cm. high and 17.5 cm. at its widest part. The highly finished bowl has a peculiar shape, the body being smaller than the shoulders as if it had to stand in another vessel like a potato steamer. It is dark grey in colour, and highly polished both inside and outside. Its whole height is of 85 mm., 170 mm. at its widest part, on which two handles and two symmetrical knobs are fixed. The rim is perforated by three holes over each handle and two over each knob (fig. 16). The subconical body is 40 mm. high with a circular base of 94 mm.

13. Under the pavement of the chapel E a finely-worked brick-red bowl was found, along with a conical vessel which may have been its cover. The bowl, 10 cm. high and 16 cm. at its mouth, is furnished with a small triangular handle and a tiny knob at the opposite point. The

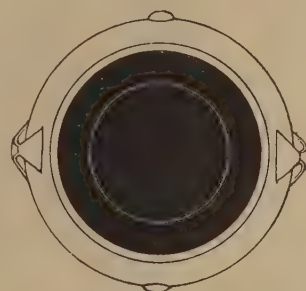
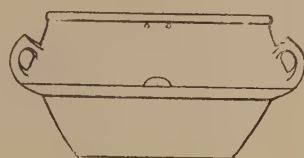


Fig. 16.

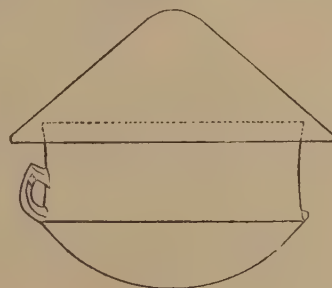


Fig. 17.

conical cover is 8 cm. high and 20 cm. at the base, with a thickness of about 6 mm. A graceful bowl of a dark grey colour is ornamented with crossed lines at the upper part and with curved lines on the convex base. It is 15 cm. high, 23 cm. at its widest part, and has a flat handle with crossed linear incisions (fig. 17).

Figs. 18, 19, 20 show specimens of decorated pottery (scale $\frac{1}{3}$) selected from thousands of neolithic sherds picked up during the excavation. All the sherds show great skill in the manufacture of the pottery, select material, careful modelling, exquisite finish, and great artistic taste in the workman. The vessels were in almost every case hand-burnished, and fixed with care in furnaces in which the



Fig. 18.

temperature was never raised to the point of vitrifying the siliceous material. The incised ornaments appear to have been cut when the vessel was quite dry and ready for baking, but always before the actual firing. From hundreds of sherds we can presume that most of the incised designs were filled in with a rich red colour, and in many cases the incised lines were meant to limit wide bands of red colour. That this pottery came to us still bearing on its surface the thick bands of red ochre is quite a marvel, as the colour adheres to the surface so lightly that the simple touch of the finger completely removes it. Probably the paint had, originally, a good body and stuck firmly to the clay, but the adhesive material has disappeared, leaving behind the fine dust of the colouring matter.

Pls. XL and XLI show specimens of this coloured pottery. Very remarkable are the sherds shown in Pl. XL. This pottery of a superior workmanship is of a



Fig. 19.



Fig. 20.

light fawn colour with bands of a redder clay inlaid in it so deftly as to have the appearance of painted scrolls. The surface is made of a fine slip which takes a remarkable lustre.

Fig. 21 shows fragments of a large clay jar varying in thickness from 13 to 28 mm. The vessel was probably about 35 cm. high and 25 cm. in diameter, and studded with flat raised discs. A peculiarity of this vessel consists in an ornament made of a series of plain thick frames in the shape of pointed shields.

Fig. 22. Two sherds represent, very distinctly, figures of hogs. In one small sherd, 1 cm. thick, 7 cm. by 5 cm., the figure, raised about 5 mm., is worked in a bold manner; in the other sherd the animal is more roughly modelled, and



Fig 21.



Fig. 22.

the rest of the vessel was decorated by oval bosses intended to represent human faces with long prominent noses and eyes consisting of long slits. Four of these faces are well preserved, but three more existed on the sherd, as shown by the dull grey patches left where the knobs were detached.

I have to thank Mr. Herbert Hyde of St. Helen's, England, who, during a long convalescence from a severe illness contracted in the field, very kindly volunteered to make the accompanying drawings.



Fig. 1. Niche with pitted slabs in space r



Fig. 2. Relief ornament on stone block in front of main entrance, and façade of niche e



Fig. 1. Entrance to room w, with standing stone in middle of apse



Fig. 2. Entrance to room w in space o



Fig. 3. Recesses in room w



Fig. 1. SE. view of apse c, of which the right wall is demolished

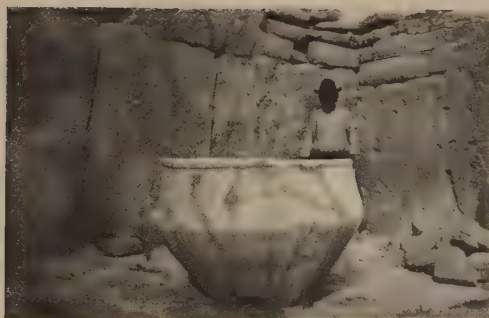


Fig. 2. Stone basin in apse n, repaired



Fig. 3. Stone basin reconstructed from the fragments found

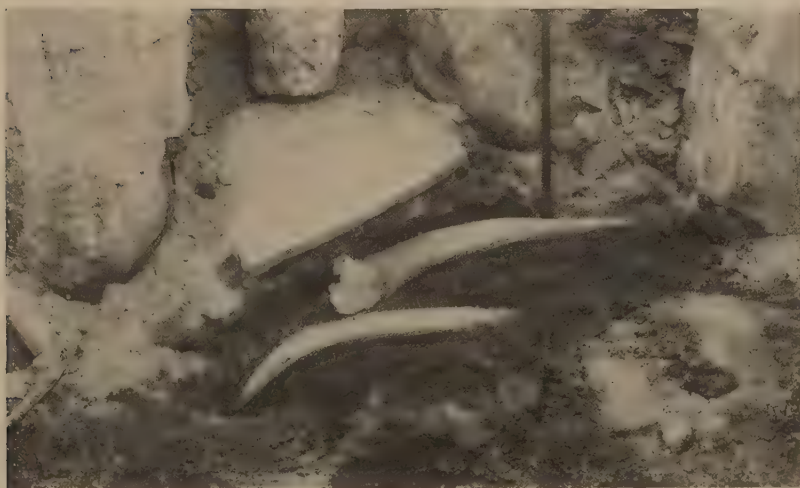


Fig. 4. Horn-cores of bulls *in situ* on floor of room m



Fig. 1. Main passage between apses AB and CD



Fig. 2. Passage between apses AB and CD, looking South, showing standing stone in space o



Fig. 3. Relief ornament on slab blocking the entrance to apses A and B



Fig. 4. Relief ornament on slab at the entrance of apse A



Fig. 5. Bird's-eye view of apses A and B



Fig. 1. View of apse D taken from apse C, showing hearth and large stone vessel



Fig. 2. Stone hearth in passage between apses A and B, and entrance to apses X and Y



Fig. 1. Stone hearth, and blocked passage to apses x and y



Fig. 2. Pillar in apse A, showing holes in which pebbles and shells were set



Fig. 3. Main passage leading to apses A and B



Fig. 4. Apse y, showing springing of stone roof and niche at the back

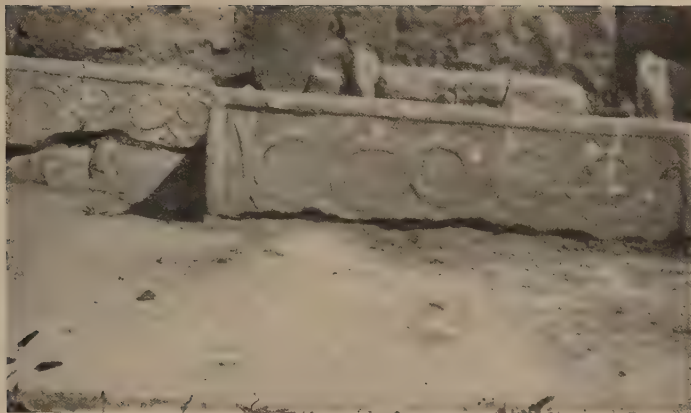


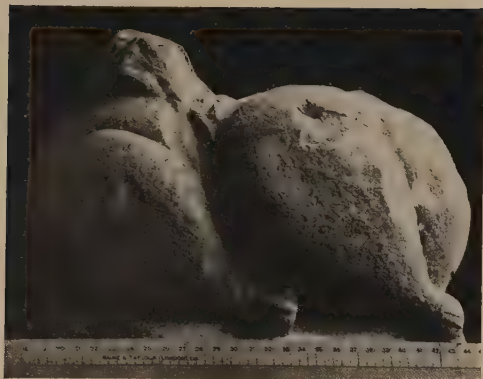
Fig. 1. Relief ornament on stone blocks in room 1



Fig. 2. Relief ornament on stone block in room 1



Fig. 3. Relief ornaments on stone block in room 1
supporting the colossal limestone statue



a



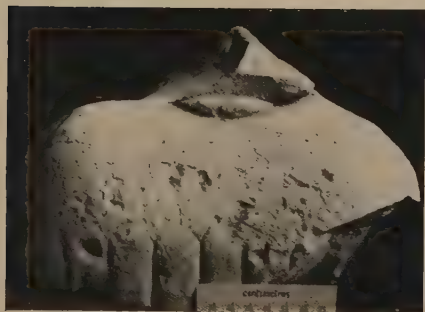
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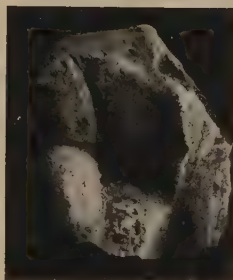
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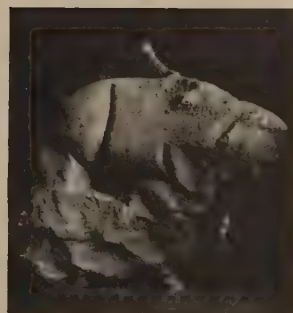
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e



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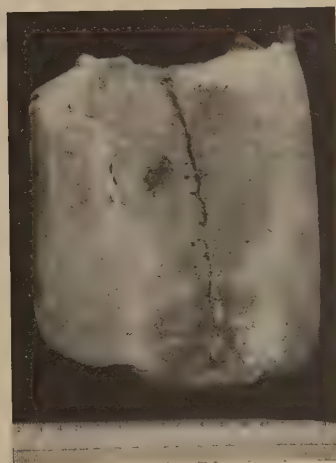
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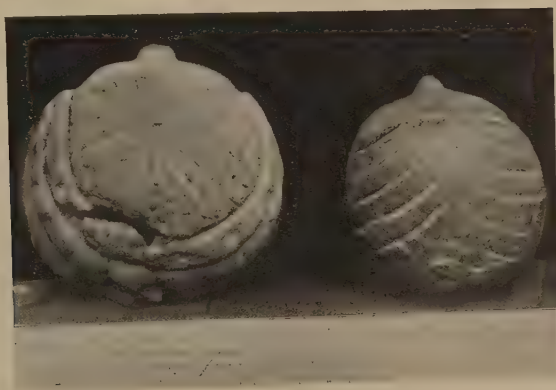
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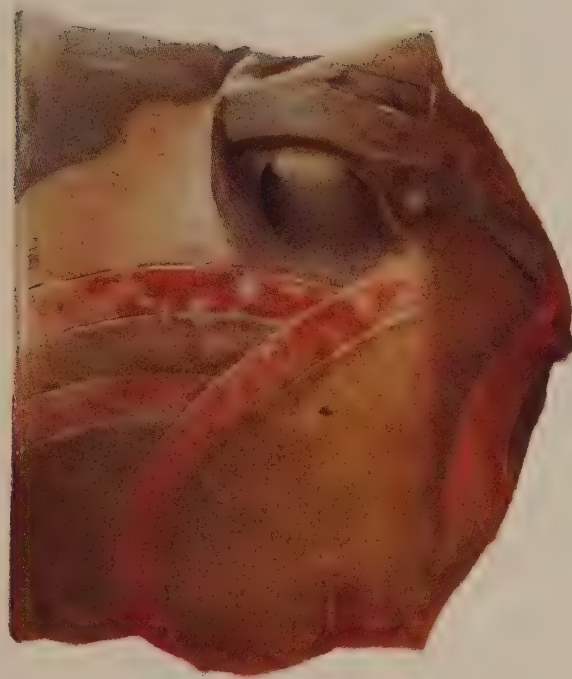
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